Docket Nos. RP94–182–004 and RP94–272–002, NorAm Gas Transmission Company
CAG–74.
Docket Nos. RP94–197–000, RP93–151–007 and RP94–309–000, Tennessee Gas Pipeline Company
CAG–75.
Docket No. PR94–3–001, KansOk Partnership
CAG–76.
Docket No. CP94–38–000, Ouachita River Gas Storage Company, L.L.C.
CAG–77.
Docket No. CP94–88–000, Great Lakes Gas Transmission Limited Partnership

Hydro Agenda

H–1.
Reserved

Electric Agenda

E–1.
Omitted
E–2.
Omitted
E–3.
Omitted
E–4.
Omitted

Oil and Gas Agenda

I. Pipeline Rate Matters

PR–1.
Omitted

II. Restructuring Matters

RS–1.
Reserved

III. Pipeline Certificate Matters

PC–1.
Omitted
PC–2.
Omitted
PC–3.
Docket Nos. CP94–57–002 and 001, Columbia LNG Corporation
Docket Nos. CP94–59–003 and 001, Cove Point LNG Limited Partnership
Docket No. CP94–191–001, Columbia Gas Transmission Company and Columbia LNG Corporation. Order on application for a certificate to recommission Cove Point liquefied natural gas facilities.

Dated: September 21, 1994.

Lois D. Cashell,

Secretary.

[FR Doc. 94–23885 Filed 9–22–94; 2:02 pm]

BILLING CODE 6717–01–P

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 59 FR 48469, September 21, 1994.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 2:00 p.m., Monday, September 26, 1994.

CHANGES IN THE MEETING: Deletion of the following open item from the meeting:

Summary Agenda

2. (a) Request by Fleet Financial Group, Inc., Providence, Rhode Island, for an exemption from the anti-tying provisions of section 106 of the Bank Holding Company Act; and (b) a related proposed amendment for public comment to modify Regulation Y (Bank Holding Companies and Change in Bank Control) to apply the exemption to all banks.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204.

Dated: September 22, 1994.

Jennifer J. Johnson,

Deputy Secretary of the Board.

[FR Doc. 94–23866 Filed 9–22–94; 1:03 pm]

BILLING CODE 6210–01–P

federal register

Monday
September 26, 1994

Part II

Environmental Protection Agency

40 CFR Parts 9 and 82
Protection of Stratospheric Ozone;
Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 82

[FRL–5078–4]

Protection of Stratospheric Ozone

AGENCY: Environmental Protection Agency.

ACTION: Notice of proposed rulemaking.

SUMMARY: This action proposes restrictions or prohibitions on substitutes for ozone depleting substances (ODSs) under the U.S. Environmental Protection Agency (EPA) Significant New Alternatives Policy (SNAP) program. SNAP implements section 612 of the amended Clean Air Act of 1990 which requires EPA to evaluate and regulate substitutes for the ODSs to reduce overall risk to human health and the environment. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for each of the major industrial use sectors. The intended effect of the SNAP program is to expedite movement away from ozone depleting compounds while avoiding a shift into high-risk substitutes posing other environmental problems.

On March 18, 1994, EPA promulgated a final rulemaking setting forth its plan for administering the SNAP program, and issued decisions on the acceptability and unacceptability of a number substitutes. In this notice of proposed rulemaking (NPRM), EPA is issuing its preliminary decisions on the acceptability of certain substitutes not previously reviewed by the Agency. To arrive at determinations on the acceptability of substitutes, the Agency completed a cross-media evaluation of risks to human health and the environment by sector end-use.

Today's action proposes new additions to the list of controlled or prohibited substitutes. As described in the final rule for the SNAP program, EPA does believe that notice-and-comment rulemaking is required to place any alternative on the list of prohibited substitutes, to list an alternative as acceptable only under certain use conditions or certain narrow end-use applications.

EPA does not, however, believe that rulemaking procedures are required to list alternatives as acceptable with no limitations. Such listings do not impose any sanction, nor do they remove any prior license to use a substitute. Consequently, EPA is adding substitutes to the list of acceptable alternatives without first requesting comment on new listings. Updates to the acceptable lists are published as separate notices in the **Federal Register**. A comprehensive compilation of all listings will be published annually.

DATES: Written comments or data provided in response to this document must be submitted by November 10, 1994.

ADDRESSES: Written comments and data should be sent to Docket A–91–42, Central Docket Section, South Conference Room 4, U.S. Environmental Agency, 401 M Street SW., Washington, DC 20460. The docket may be inspected between 8 a.m. and 4 p.m. on weekdays. Telephone (202) 260–7549. As provided in 40 CFC part 2, a reasonable fee may be charged for photocopying. To expedite review, a second copy of the comments should be sent to Sally Rand, Stratospheric Protection Division, Office of Atmospheric Programs, U.S. EPA, 401 M Street SW., 6205–J, Washington, DC 20460. Information designated as Confidential Business Information (CBI) under 40 CFR, part 2 subpart B must be sent directly to the contact person for this notice. However, the Agency is requesting that all respondents submit a non-confidential version of their comments to the docket as well.

FOR FURTHER INFORMATION CONTACT: Sally Rand at (202) 233–9739 or fax (202) 233–9577, Substitutes Analysis and Review Branch, Stratospheric Protection Division, Office of Atmospheric Programs, Office of Air and Radiation, Washington, DC.

SUPPLEMENTARY INFORMATION:

I. Overview of This Action

This action is divided into five sections, including this overview:

II. Section 612 Program

A. Statutory Requirements

Section 612 of the Clean Air Act authorizes EPA to develop a program for evaluating alternatives to ozone-depleting substances. EPA is referring to this program as the Significant New Alternatives Policy (SNAP) program. The major provisions of section 612 are:

Rulemaking—Section 612(c) requires EPA to promulgate rules making it unlawful to replace any class I (chlorofluorocarbon, halon, carbon tetrachloride, methyl chloroform, methyl bromide, and hydrobromofluorocarbon) or class II (hydrochlorofluorocarbon) substance with any substitute that the Administrator determines may present adverse effects to human health or the environment where the Administrator has identified an alternative that: (1) Reduces the overall risk to human health and the environment; and (2) is currently or potentially available.

Listing of Unacceptable/Acceptable Substitutes—Section 612(c) also requires EPA to publish a list of the substitutes unacceptable for specific uses. EPA must publish a corresponding list of acceptable alternatives for specific uses.

Petition Process—Section 612(d) grants the right to any person to petition EPA to add a substitute to or delete a substitute from the lists published in accordance with section 612(c). The Agency has 90 days to grant or deny a petition. Where the Agency grants the petition, EPA must publish the revised lists within an additional 6 months.

90-day Notification—Section 612(e) requires EPA to require any person who produces a chemical substitute for a class I substance to notify the Agency not less than 90 days before new or existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's unpublished health and safety studies on such substitutes.

Outreach—Section 612(b)(1) states that the Administrator shall seek to maximize the use of federal research facilities and resources to assist users of class I and II substances in identifying and developing alternatives to the use of such substances in key commercial applications.

Clearinghouse—Section 612(b)(4) requires the Agency to set up a public clearinghouse of alternative chemicals, product substitutes, and alternative manufacturing processes that are available for products and manufacturing processes which use class I and II substances.

B. Regulatory History

On March 18, 1994, EPA published the Final Rulemaking (FRM) (59 FR 13044) which described the process for administering the SNAP program and issued EPA's first acceptability lists for substitutes in the major industrial use sectors. These sectors include: refrigeration and air conditioning; foam blowing; solvent cleaning; fire suppression and explosion protection; sterilants; aerosols; adhesives, coatings and inks; and tobacco expansion. These

sectors comprise the principal industrial sectors that historically consume large volumes of ozone-depleting compounds.

The Agency defines a "substitute" as any chemical, product, substitute, or alternative manufacturing process, whether existing or new, that could replace a class I or class II substance. Anyone who produces a substitute must provide the Agency with health and safety studies on the substitute at least 90 days before introducing it into interstate commerce for significant new use as an alternative. This requirement applies to chemical manufacturers, but may include importers, formulators or end-users when they are responsible for introducing a substitute into commerce.

III. Proposed Listing of Substitutes

To develop the lists of unacceptable and acceptable substitutes, EPA conducts screens of health and environmental risks posed by various substitutes for ozone-depleting compounds in each use sector. The outcome of these risks screens can be found in the public docket, as described above in the **ADDRESSES** portion of this notice.

Under section 612, the Agency has considerable discretion in the risk management decisions it can make in SNAP. The Agency has identified five possible decision categories: acceptable, acceptable subject to use conditions; acceptable subject to narrowed use limits; unacceptable; and pending. Acceptable substitutes can be used with no limits for all applications within the relevant sector end-use. Conversely, it is illegal to replace an ODS with a substitute listed by SNAP as unacceptable. A pending listing represents substitutes for which the Agency has not received complete data or has not completed its review of the data.

After reviewing a substitute, the Agency may make a determination that a substitute is acceptable only if conditions of use are met to minimize risks to human health and the environment. Use of such substitutes in ways that are inconsistent with such use conditions renders these substitutes unacceptable.

Even though the Agency can restrict the use of a substitute based on the potential for adverse effects, it may be necessary to permit a narrowed range of use within a sector end-use because of the lack of alternatives for specialized applications. Users intending to adopt a substitute acceptable with narrowed use limits must ascertain that other acceptable alternatives are not technically feasible. Companies must document the results of their evaluation, and retain the results on file for the purpose of demonstrating compliance. This documentation shall include descriptions of substitutes examined and rejected, processes or products in which the substitute is needed, reason for rejection of other alternatives, e.g., performance, technical or safety standards, and the anticipated date other substitutes will be available and projected time for switching to other available substitutes. Use of such substitutes in application and end-uses which are not specified as acceptable in the narrowed use limit renders these substitutes unacceptable.

In this Notice of Proposed Rulemaking (NPRM), EPA is issuing its preliminary decision on the acceptability of certain substitutes not previously reviewed by the Agency. As described in the final rule for the SNAP program (59 FR 13044), EPA believes that notice-and-comment rulemaking is required to place any alternative on the list of prohibited substitutes, to list a substitute as acceptable only under certain use conditions or narrowed use limits, or to remove an alternative from either the list of prohibited or acceptable substitutes.

EPA does not believe that rulemaking procedures are required to list alternatives as acceptable with no limitations. Such listings do not impose any sanction, nor do they remove any prior license to use a substitute. Consequently, EPA is adding substitutes to the list of acceptable alternatives without first requesting comment on new listings. Updates to the acceptable and pending lists are published as separate notices in the **Federal Register**.

Parts A. through E. below present a detailed discussion of the substitute listing determinations by major use sector. Tables summarizing listing decisions in this Notice of Proposed Rulemaking are in Appendix A. The comments contained in Appendix A provide additional information on a substitute. Since comments are not part of the regulatory decision, they are not mandatory for use of a substitute. Nor should the comments be considered comprehensive with respect to other legal obligations pertaining to the use of the substitute. However, EPA encourages users of acceptable substitutes to apply all comments in their use of these substitutes. In many instances, the comments simply allude to sound operating practices that have already been identified in existing industry and/or building-code standards. Thus, many of the comments, if adopted, would not require significant changes in existing operating practices for the affected industry.

A. Refrigeration and Air Conditioning

1. Overview

The refrigeration and air conditioning sector includes all uses of class I and class II substances to produce cooling, including mechanical and non-mechanical refrigeration, air conditioning, and heat transfer. Please refer to the final SNAP rule (59 FR 13044) for a more detailed description of this sector.

The refrigeration and air conditioning sector is divided into the following end-uses:

- commercial comfort air conditioning;
- industrial process refrigeration system;
- industrial process air conditioning;
- ice skating rinks;
- uranium isotope separation processing;
- cold storage warehouses;
- refrigerated transport;
- retail food refrigeration;
- vending machines;
- water coolers;
- commercial ice machines;
- household refrigerators;
- household freezers;
- residential dehumidifiers;
- motor vehicle air conditioning;
- residential air conditioning and heat pumps;
- non-mechanical heat transfer; and
- very low temperature refrigeration.

In addition, each end-use is divided into retrofit and new equipment applications. EPA has not necessarily reviewed substitutes in every end-use for this NPRM.

EPA has modified the list of end-uses for this sector for this SNAP update. First, EPA has changed the name of the heat transfer end-use to non-mechanical heat transfer. This change is intended to avoid confusion between systems that move heat from a cool area to a warm one (mechanical refrigeration) and systems that simply aid the movement of heat away from warm areas (non-mechanical heat transfer). The second change is that EPA added a new end-use, very low temperature refrigeration. Substitutes for this end-use have been reviewed since the final rule, and therefore have been added for this SNAP update. Finally, EPA has also reviewed substitutes for CFC–13, R–13B1, and R–503 industrial process refrigeration. Please refer to the final SNAP rule (59 FR 13044) for a detailed description of end-uses other than these three. EPA may continue to add other end-uses in future SNAP updates.

a. Non-mechanical Heat Transfer. As discussed above, this end-use includes all cooling systems that rely on a fluid

to remove heat from a heat source to a cooler area, rather than relying on mechanical refrigeration to move heat from a cool area to a warm one. Generally, there are two types of systems: systems with fluid pumps, referred to as recirculating coolers, and those that rely on natural convection currents, known as thermosyphons.

b. Very Low Temperature Refrigeration. Medical freezers, freeze-dryers, and other small appliances require extremely reliable refrigeration cycles. These systems must meet stringent technical standards that do not normally apply to refrigeration systems. They usually have very small charges. Because they operate at very high vapor pressures, and because performance is critically affected by any charge loss, standard maintenance for these systems tends to reduce leakage to a level considerably below that for other types of refrigeration and air conditioning equipment.

c. CFC–13, R–13B1, and R–503 Industrial Process Refrigeration. This end-use differs from other types of industrial refrigeration only in the extremely low temperature regimes that are required. Although some substitutes may work in both these extremely low temperatures and in systems designed to use R–502, they are acceptable only for this end-use because of global warming and atmospheric lifetime concerns. These concerns are discussed more fully below.

2. Substitutes for Refrigerants

Substitutes fall into eight broad categories. Seven of these categories are chemical substitutes used in the same vapor compression cycle as the ozone-depleting substances being replaced. They include hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), hydrocarbons, refrigerant blends, ammonia, perfluorocarbons (PFCs), and chlorine systems. The eighth category includes alternative technologies that generally do not rely on vapor compression cycles. Please refer to the final SNAP rule (59 *FR* 13044) for more discussion of these broad categories.

a. Acceptable Subject to Use Conditions. (1) CFC–12 Automobile and Non-automobile Motor Vehicle Air Conditioners, Retrofit and New. EPA is concerned that the existence of several substitutes in this end-use may increase the likelihood of significant refrigerant cross-contamination and potential failure of both air conditioning systems and recovery/recycling equipment. In addition, a smooth transition to the use of substitutes strongly depends on the continued purity of the recycled CFC–12 supply. In order to prevent cross-contamination and preserve the purity of recycled refrigerants, EPA is proposing several conditions on the use of all motor vehicle air conditioning refrigerants. For the purposes of this rule, no distinction is made between "retrofit" and "drop-in" refrigerants; retrofitting a car to use a new refrigerant includes all procedures that result in the air conditioning system using a new refrigerant.

In particular, when retrofitting a CFC–12 system to use any substitute refrigerant, the following conditions must be met:

• Each refrigerant may only be used with a set of fittings that is unique to that refrigerant. These fittings (male or female, as appropriate) must be used with all containers of the refrigerant, on can taps, on recovery, recycling, and charging equipment, and on all air conditioning system service ports. These fittings must be designed to mechanically prevent cross-charging with another refrigerant. A refrigerant may only be used with the fittings and can taps specifically intended for that refrigerant. Using an adapter or deliberately modifying a fitting to use a different refrigerant will be a violation of this use condition. In addition, fittings shall meet the following criteria, derived from Society of Automotive Engineers (SAE) standards and recommended practices:

—When existing CFC–12 service ports are to be retrofitted, conversion assemblies shall attach to the CFC–12 fitting with a thread lock adhesive and/or a separate mechanical latching mechanism in a manner that permanently prevents the assembly from being removed.

—All conversion assemblies and new service ports must satisfy the vibration testing requirements of sections 3.2.1 or 3.2.2 of SAE J1660, as applicable, excluding references to SAE J639 and SAE J2064, which are specific to HFC–134a.

—In order to prevent discharge of refrigerant to the atmosphere, systems shall have a device to limit compressor operation before the pressure relief device will vent refrigerant. This requirement is waived for systems that do not feature such a pressure relief device.

—All CFC–12 service ports shall be retrofitted with conversion assemblies or shall be rendered permanently incompatible for use with CFC–12 related service equipment by fitting with a device attached with a thread lock adhesive and/or a separate mechanical latching mechanism in a manner that prevents the device from being removed.

• When a retrofit is performed, a label must be used as follows:

—The person conducting the retrofit must apply a label to the air conditioning system in the engine compartment that contains the following information:

*—the name and address of the technician and the company performing the retrofit

*—the date of the retrofit

*—the trade name, charge amount, and, when applicable, the ASHRAE refrigerant numerical designation of the refrigerant

*—the type, manufacturer, and amount of lubricant used

*—if the refrigerant is or contains an ozone-depleting substance, the statement "This refrigerant contains an ozone-depleting substance and it is therefore subject to the venting prohibition, recycling, and other provisions of regulations issued under section 609 of the Clean Air Act."

*—if the refrigerant is not or does not contain any ozone-depleting substances, the statement "This refrigerant does not deplete stratospheric ozone, and as of November 15, 1995, at the latest, it is subject to the venting prohibition, recycling, and other provisions of regulations issued under section 609 of the Clean Air Act."

*—if the refrigerant displays flammability limits as measured according to ASTM E681, the statement "This refrigerant is FLAMMABLE. Take appropriate precautions."

—This label must be large enough to be easily read and must be permanent.

—The background color must be unique to the refrigerant.

—The label must be affixed to the system over information related to the previous refrigerant, in a location not normally replaced during vehicle repair.

—Information on the previous refrigerant that cannot be covered by the new label must be permanently rendered unreadable.

• No substitute refrigerant may be used to "top-off" a system that uses another refrigerant. The original refrigerant must be recovered in accordance with regulations issued under section 609 of the CAA prior to charging with a substitute.

Since these use conditions necessitate unique fittings and labels, it will be necessary for developers of automotive refrigerants to consult with EPA about the existence of other alternatives. Such discussions will lower the risk of duplicating fittings already in use.

No determination guarantees satisfactory performance from a

refrigerant. Consult the original equipment manufacturer or service personnel for further information on using a refrigerant in a particular system.

(a) HFC–134a. *HFC–134a is acceptable as a substitute for CFC–12 in retrofitted and new motor vehicle air conditioners, subject to the use conditions applicable to motor vehicle air conditioning described above.* HFC–134a does not contribute to ozone depletion. HFC–134a's GWP and atmospheric lifetime are close to those of other alternatives which have been determined to be acceptable for this end-use. However, HFC–134a's contribution to global warming could be significant in leaky end-uses such as motor vehicle air conditioning systems (MVACS). EPA has determined that the use of HFC–134a in these applications is acceptable because industry continues to develop technology to limit emissions. In addition, the number of available substitutes for use in MVACS is currently limited. HFC–134a is not flammable and its toxicity is low. While HFC–134a is compatible with most existing refrigeration and air conditioning equipment parts, it is not compatible with the mineral oils currently used in such systems. An appropriate ester-based, polyalkylene glycol-based, or other type of lubricant should be used. Consult the original equipment manufacturer or the retrofit kit manufacturer for further information.

(b) R–401C. *R–401C, which consists of HCFC–22, HFC–152a, and HCFC–124, is acceptable as a substitute for CFC–12 in retrofitted and new motor vehicle air conditioners, subject to the use conditions applicable to motor vehicle air conditioning described above.* HCFC–22 and HCFC–124 contribute to ozone depletion, but to a much lesser degree than CFC–12. The production of HCFC–22 will be phased out according to the accelerated phaseout schedule (published 12/10/93, 58 FR 65018). The GWP of HCFC–22 is somewhat higher than other alternatives for this end-use. Experimental data indicate that HCFC–22 may leak through flexible hosing in mobile air conditioners at a high rate. In order to preserve the blend's composition and to reduce its contribution to global warming, EPA strongly recommends using barrier hoses when hose assemblies need to be replaced during a retrofit procedure. The GWPs of the other components are low. Although this blend does contain one flammable constituent, the blend itself is not flammable. Leak testing demonstrated that the blend never becomes flammable.

(c) HCFC Blend Beta. *HCFC Blend Beta is acceptable as a substitute for CFC–12 in retrofitted and new motor vehicle air conditioners, subject to the use conditions applicable to motor vehicle air conditioning described above.* The composition of this blend has been claimed confidential by the manufacturer. This blend contains at least one HCFC, and therefore contributes to ozone depletion, but to a much lesser degree than CFC–12. Regulations regarding recycling and reclamation issued under section 609 of the Clean Air Act apply to this blend. Its production will be phased out according to the accelerated schedule (published 12/10/93, 58 FR 65018). The GWPs of the components are moderate to low. This blend is nonflammable, and leak testing has demonstrated that the blend never becomes flammable.

b. Acceptable Subject to Narrowed Use Limits. (1) Non-mechanical Heat Transfer, New and Retrofit.

(a) Perfluorocarbons. *Perfluorocarbons are proposed acceptable as substitutes for CFC–11, CFC–12, CFC–113, CFC–114, and CFC–115 in new and retrofitted thermosyphons and recirculating coolers only where no other alternatives are technically feasible due to safety or performance requirements.* PFCs covered by this determination are C_3F_8, C_4F_{10}, C_5F_{12}, $C_5F_{11}NO$, C_6F_{14}, $C_6F_{13}NO$, C_7F_{16}, $C_7F_{15}NO$, C_8F_{18}, $C_8F_{16}O$, AND $C_9F_{21}N$. PFCs offer high dielectric resistance and they are low in toxicity and nonflammable. The principal characteristic of concern for PFCs is that they have long atmospheric lifetimes and have the potential to contribute to global climate change. For instance, C_5F_{12} has a lifetime of 4,100 years and a 100-year GWP of 5,600. PFCs are also included in the Climate Change Action Plan which broadly instructs EPA to use section 612 of the CAA, as well as voluntary programs, to control emissions. Despite these concerns, EPA is proposing to list PFCs as acceptable in certain small applications because they may be the only substitutes that can satisfy safety or performance requirements. For example, a transformer may require very high dielectric strength, or a heat transfer system for a chlorine manufacturing process could require compatibility with the process stream.

Users should note, however, that use of a PFC should be a last resort. As the proposed determination states, PFCs should be used "only where no other alternatives are technically feasible due to safety or performance requirements." This statement requires users to conduct a thorough search for other substitutes. Although EPA does not require users to submit information on such a search, companies must keep the results on file for future reference.

In cases where users must adopt PFCs, they should make every effort to:

- Recover and recycle these fluids during servicing
- Adopt maintenance practices that reduce leakage as much as is technically feasible
- Recover these fluids after the end of the equipment's useful life and either recycle them or destroy them
- Continue to search for other long-term alternatives

Users of PFCs should note that if other alternatives become available, EPA could be petitioned to list PFCs as unacceptable due to the availability of other suitable substitutes. If such a petition were granted, EPA may grandfather existing uses but only upon consideration of cost and timing of testing and implementation of new substitutes. In addition, while this listing allows for use of PFCs in some new systems, a petition indicating widespread design of systems using PFCs where other alternatives exist could adversely impact any grandfathering decisions.

EPA believes these end-uses are covered under section 608 of the CAA and encourages voluntary compliance with the recycling and leak repair provisions of that rule until new rulemakings specifically address non-ozone-depleting refrigerants.

c. Unacceptable Substitutes.

(1) R–403B

R–403B, which consists of HCFC–22, R–218, and propane, is proposed unacceptable as a substitute for R–502 in the following new and retrofitted end-uses:

- industrial process refrigeration;
- cold storage warehouses;
- refrigerated transport;
- retail food refrigeration;
- commercial ice machines; and
- household freezers.

R–218, perfluoropropane, has an extremely high GWP and lifetime. Although this substitute may offer energy efficiency gains, its lifetime and direct GWP pose additional risk beyond that of other substitutes for these end-uses. In particular, the lifetime of R–218 is over 2000 years, which means that global warming and other effects would be essentially irreversible. EPA believes that while other substitutes may have high GWPs, they do not exhibit such long lifetimes.

(2) R–405A

R–405A, which is composed of HCFC–22, HFC–152a, HCFC–142b, and R–c318,

is proposed unacceptable as a substitute for CFC–12, R–500, and R–502 in the following new and retrofitted end-uses:

- commercial comfort air conditioning;
- industrial process refrigeration;
- ice skating rinks;
- cold storage warehouses;
- refrigerated transport;
- retail food refrigeration;
- vending machines;
- water coolers;
- commercial ice machines;
- household refrigerators;
- household freezers;
- residential dehumidifiers; and
- motor vehicle air conditioning.

R–405A was listed as HCFC/HFC/fluoroalkane Blend A in previous notices. R–405A contains a high proportion of R–c318, cycloperfluorobutane, which has an extremely high GWP and lifetime. Although this substitute may offer energy efficiency gains, its lifetime and direct GWP pose additional risk beyond that of other substitutes for these end-uses. In particular, the lifetime of R–c318 is over 3000 years, which means that global warming and other effects would be essentially irreversible. EPA believes that while other substitutes may have high GWPs, they do not exhibit such long lifetimes.

(3) Hydrocarbon Blend B

Hydrocarbon Blend B is proposed unacceptable as a substitute for CFC–12 in the following new and retrofitted end-uses:

- commercial comfort air conditioning;
- ice skating rinks;
- cold storage warehouses;
- refrigerated transport;
- retail food refrigeration;
- vending machines;
- water coolers;
- commercial ice machines;
- household refrigerators;
- household freezers;
- residential dehumidifiers; and
- motor vehicle air conditioning.

Flammability is the primary concern. EPA believes the use of this substitute in very leaky uses like motor vehicle air conditioning may pose a high risk of fire. EPA requires a risk assessment be conducted to demonstrate this blend may be safely used in any CFC–12 end-uses. The manufacturer of this blend has not submitted such a risk assessment, and EPA therefore finds it unacceptable.

(4) Flammable Substitutes

Flammable substitutes, defined as having flammability limits as measured according to ASTM E–681 with modifications included in Society of Automotive Engineers Recommended Practice J1657, including blends which become flammable during fractionation, are proposed unacceptable as substitutes for CFC–12 in retrofitted motor vehicle air conditioning systems.

Flammable refrigerants differ from traditional substances in several ways: potential gains in energy efficiency, reductions in direct contribution to global warming, and additional risks from fire. Flammable refrigerants may be good substitutes in systems designed with fire risks in mind. In addition, in certain circumstances, they may serve well as substitutes in retrofit uses. EPA encourages research efforts into the use of flammable refrigerants, but remains concerned about the dangers. Because of these concerns, EPA has established the requirement that manufacturers of flammable refrigerants conduct detailed risk assessments in all end-uses. The risks from flammability are extremely sensitive to the size of charge and end-use.

In MVACS, flammable refrigerants pose risks not found in stationary equipment, including the potential for collisions, the placement of the condenser directly behind the grille, flexible hoses which could be punctured, the hazard to technicians who are expecting to handle flammable fluids, the danger to passengers from evaporator leaks, and the dangers to personnel involved in disposal of old automobiles. Due to the length of SNAP review, certain substitutes have been marketed which EPA believes may pose substantial risk to users. The intent of the 90-day review process was not to allow manufacturers to market risky substitutes, but rather to ensure a thorough review. Because of potential risks to users and service personnel, EPA finds it necessary to find all flammable substitutes unacceptable in retrofitted automotive air conditioning to prevent hazardous substitutes from being marketed prior to a thorough risk assessment.

EPA continues to encourage investigation of all substitute refrigerants, including flammable substances. This unacceptable determination only applies to retrofitted MVACS. If a manufacturer wishes an acceptable determination for a flammable substitute in MVACS, this risk assessment must be conducted in a scientifically valid manner. EPA will consider such a risk assessment in any determination on the substitute.

B. Solvents

1. Acceptable Subject to Use Conditions

a. Electronics Cleaning. (1) HCFC–225 ca/cb. *HCFC–225 is proposed acceptable subject to use conditions as a substitute for CFC–113 and MCF in electronics cleaning.* The HCFC–225 ca isomer has a company-set exposure limit of 25 ppm. The company set exposure limit of the HCFC–225 cb isomer is 250 ppm. These limits should be readily achievable since HCFC–225 is only sold commercially as a (45%/50%) blend of –ca and –cb isomers. In addition, the vapor degreasing and cold cleaning equipment where HCFC–225 is used, typically has very low emissions.

b. Precision Cleaning. (1) HCFC–225 ca/cb. *HCFC–225 is proposed acceptable subject to use conditions as a substitute for CFC–113 and MCF in precision cleaning.* The HCFC–225 ca isomer has a company-set exposure limit of 25 ppm. The company set exposure limit of the HCFC–225 cb isomer is 250 ppm. These limits should be readily achievable since HCFC–225 is only sold commercially as a (45%/50%) blend of –ca and –cb isomers. In addition, the vapor degreasing and cold cleaning equipment where HCFC–225 is used, typically has very low emissions.

2. Unacceptable Substitutes

a. Metals Cleaning. (1) Dibromomethane. *Dibromomethane is proposed as an unacceptable substitute for CFC–113 and MCF in metals cleaning.* Dibromomethane has a comparatively high ODP and other alternatives exist which do not pose comparable risk.

b. Electronics Cleaning. (2) Dibromomethane. *Dibromomethane is proposed as an unacceptable substitute for CFC–113 and MCF in electronics cleaning.* Dibromomethane has a comparatively high ODP and other alternatives exist.

c. Precision Cleaning. (3) Dibromomethane. *Dibromomethane is proposed as an unacceptable substitute for CFC–113 and MCF in precision cleaning.* Dibromomethane has a comparatively high ODP and other alternatives exist.

C. Fire Suppression and Explosion Protection

1. Proposed Acceptable Subject to Use Conditions

a. Total Flooding Agents. (1) C_3F_8. *C_3F_8 is proposed acceptable as a Halon 1301 substitute where other alternatives are not technically feasible due to performance or safety requirements: (a) Due to their physical or chemical*

properties or (b) where human exposure to the agents may approach cardiosensitization levels or result in other unacceptable health effects under normal operating conditions. This proposed agent is subject to the same use conditions stipulated for all total flooding agents, that is:

- Where egress from an area cannot be accomplished within one minute, the employer shall not use this agent in concentrations exceeding its NOAEL.
- Where egress takes longer than 30 seconds but less than one minute, the employer shall not use the agent in a concentration greater than its LOAEL.
- Agent concentrations greater than the LOAEL are only permitted in areas not normally occupied by employees provided that any employee in the area can escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.

Cup burner tests in heptane indicate that C_3F_8 can extinguish fires in a total flood application at concentrations of 7.30 per cent and therefore has a design concentration of 8.8 per cent. The cardiotoxicity NOAEL of 30 per cent for this agent is well above its extinguishment concentration and therefore is safe for use in occupied areas. This agent can replace Halon 1301 by a ratio of 2 to 1 by weight.

Using agents in high concentrations poses a risk of asphyxiation by displacing oxygen. With an ambient oxygen level of 21 per cent, a design concentration of 22.6 per cent may reduce oxygen levels to approximately 16 per cent, the minimum level considered to be required to prevent impaired judgement or other physiological effects. Thus, the oxygen level resulting from discharge of this agent must be at least 16 per cent.

C_3F_8 has no ozone depletion potential, and is nonflammable, essentially non-toxic, and is not a VOC. However, this agent has an atmospheric lifetime of 3,200 years and a 100-year GWP of 6100. Due to the long atmospheric lifetime of C_3F_8, the Agency is finding this chemical acceptable only in those limited instances where no other alternative is technically feasible due to performance or safety requirements. In most total flooding applications, the Agency believes that alternatives to C_3F_8 exist. EPA intends that users select C_3F_8 out of need and that this agent be used as the agent of last resort. Thus, a user must determine that the requirements of the specific end-use preclude use of other available alternatives.

Users must observe the limitations on C_3F_8 acceptability by undertaking the following measures: (i) conduct an evaluation of foreseeable conditions of end use; (ii) determine that human exposure to the other alternative extinguishing agents may approach or result in cardiosensitization or other unacceptable toxicity effects under normal operating conditions; and (iii) determine that the physical or chemical properties or other technical constraints of the other available agents preclude their use.

EPA recommends that users minimize unnecessary emissions of this agent by limiting testing of C_3F_8 to that which is essential to meet safety or performance requirements; recovering C_3F_8 from the fire protection system in conjunction with testing or servicing; and destroying or recycling C_3F_8 for later use. EPA encourages manufacturers to develop aggressive product stewardship programs to help users avoid such unnecessary emissions.

(2) CF_3I. *CF_3I is proposed acceptable as a Halon 1301 substitute in normally unoccupied areas.* Any employee that could possibly be in the area must be able to escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.

CF_3I (Halon 13001) is a fluoroiodocarbon with an atmospheric lifetime of only 1.15 days due to its rapid photolysis in the presence of light. The resulting GWP of this agent is less than one, and its ODP when released at ground level is likely to be extremely low, with current conservative estimates ranging from .008 to .01. Complete analysis of the ozone depleting potential of this agent will be available in the near future.

Anticipating EPA's concern about releases of CF_3I from aircraft, and the associated likelihood of a higher ODP value when released at altitude, the military has conducted an analysis of historical releases of Halon 1301 from both military and commercial aircraft. Initial assessment indicate that emissions from U.S. military aircraft appear to have averaged about 56 pounds annually, of which 2 pounds were emitted above 30,000 feet. Commercial aircraft worldwide released an estimated average of 933 pounds of Halon 1301 annually, of which 158 pounds was released above 30,000 feet. While EPA is awaiting the results of the ODP calculations of CF_3I, it is unlikely that such low emissions at high altitude will pose a significant threat to the ozone layer.

Interest in this agent is very high because it may constitute a drop-in replacement to Halon 1301 on a weight and volume basis. Initial tests have shown its weight equivalence for fire extinguishment to be 1.36, and its volume equivalence to be 1.0, while for explosion inertion it is 1.42 and 1.04 respectively. The research community is continuing to qualify the properties of this agent, including its materials compatibility, its storage stability and its effectiveness. While the manufacturer's SNAP submission only requests listing in normally unoccupied areas, preliminary cardiosensitization data received by the Agency indicate that CF_3I has a NOAEL of 0.2 per cent and a LOAEL of 0.4 per cent, and thus this agent would not suitably be for use in normally occupied areas.

(3) Gelled Halocarbon/Dry Chemical Suspension. *Gelled Halocarbon/Dry Chemical Suspension is proposed acceptable as a Halon 1301 substitute in normally unoccupied areas.* Any employee who could possibly be in the area must be able to escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.

The manufacturer is proposing to blend either of two halocarbons (HFC–125 or HFC–134a) with either ammonium polyphosphate (which is not corrosive) or monoammonium phosphate (which is corrosive on hard surfaces). An initial assessment of inhalation toxicology of fine particulates indicates that some risk exists of inhalation exposure when the particles are below a certain size compared to the mass per cubic meter in air. Particle sizes less than 10 to 15 microns and a mass above the ACGIH nuisance dust levels raise concerns which need to be further studied. In a total flooding application, the exposure levels may be of concern. In addition, because the discharge of powders obscures vision, evacuation could be impeded. EPA is asking manufacturers of total flooding systems using powdered aerosols to submit to the Agency a review of the medical implications of inhaling atmospheres flooded with fine powder particulates. While the manufacturer requested a SNAP listing for unoccupied areas only, EPA would not consider its use in occupied areas until the requested peer review is complete. Meanwhile, EPA is finding this technology acceptable for use in normally unoccupied areas.

For further discussion of this agent, including a review of particle size distributions, see the listing under "Streaming Agents—Acceptable."

(4) Inert Gas/Powdered Aerosol Blend. *Inert Gas/Powdered Aerosol Blend is acceptable as a Halon 1301 substitute in normally unoccupied areas.* In areas where personnel could possibly be present, as in a cargo area.

the employer shall provide a pre-discharge employee alarm capable of being perceived above ambient light or noise levels for alerting employees before system discharge. The pre-discharge alarm shall provide employees time to safely exit the discharge area prior to system discharge.

This alternative agent is formulated from a mixture of dry powders pressed together into pill form. Upon exposure to heat from a fire, a pyrotechnic charge initiates a series of exothermic, gas-producing reactions composed mainly of a mixture of nitrogen, carbon dioxide and water vapor, with small amounts of carbon monoxide, nitrous oxide, nitrogen dioxide, and solid residues. The oxygen level in the room is largely depleted, thus extinguishing the fire.

The manufacturer has proposed this technology for use in normally unoccupied areas only, such as engine nacelles and engine compartments, aircraft dry bay areas and unoccupied cargo areas. Comparing agents alone, deployment of 2.0 pounds of this agent at 400°F has an equivalent fire suppression effectiveness to 1.0 pound of Halon 1301 at 70°F.

This agent has no ODP. The carbon dioxide generated in the combustion of this agent has a GWP of 1.

2. Proposed Acceptable Subject to Narrowed Use Limits

a. Total Flooding Agents. (1) C_3F_8. *C_3F_8 is proposed acceptable as a Halon 1301 substitute where other alternatives are not technically feasible due to performance or safety requirements: a) due to their physical or chemical properties or b) where human exposure to the agents may approach cardiosensitization levels or result in other unacceptable health effects under normal operating conditions.* This agent is subject to the use conditions stipulated for all total flooding agents, that is:

- Where egress from an area cannot be accomplished within one minute, the employer shall not use this agent in concentrations exceeding its NOAEL.
- Where egress takes longer than 30 seconds but less than one minute, the employer shall not use the agent in a concentration greater than its LOAEL.
- Agent concentrations greater than the LOAEL are only permitted in areas not normally occupied by employees provided that any employee in the area can escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.

Cup burner tests in heptane indicate that C_3F_8 can extinguish fires in a total flood application at concentrations of 7.30 per cent and therefore has a design concentration of 8.8 per cent. The cardiotoxic NOAEL of 30 per cent for this agent is well above its extinguishment concentration; therefore, it is safe for use in occupied areas. This agent has a weight equivalence of two-to-one by weight compared to Halon 1301.

Using agents in high concentrations poses a risk of asphyxiation by displacing oxygen. With an ambient oxygen level of 21 per cent, a design concentration of 22.6 per cent may reduce oxygen levels to approximately 16 per cent, the minimum level considered to be required to prevent impaired judgement or other physiological effects. Thus, the oxygen level resulting from discharge of this agent must be at least 16 per cent.

This agent has an atmospheric lifetime of 3,200 years and a 100-year GWP of 6,100. Due to the long atmospheric lifetime of C_3F_8, the Agency is finding this chemical acceptable only in those limited instances where no other alternative is technically feasible due to performance or safety requirements. In most total flooding applications, the Agency believes that alternatives to C_3F_8 exist. EPA intends that users select C_3F_8 out of need and that this agent be used as the agent of last resort. Thus, a user must determine that the requirements of the specific end-use preclude use of other available alternatives.

Users must observe the limitations on C_3F_8 acceptability by undertaking the following measures: (i) conduct an evaluation of foreseeable conditions of end use; (ii) determine that human exposure to the other alternative extinguishing agents may approach or result in cardiosensitization or other unacceptable toxicity effects under normal operating conditions; and (iii) determine that the physical or chemical properties or other technical constraints of the other available agents preclude their use.

EPA recommends that users minimize unnecessary emissions of this agent by limiting testing of C_3F_8 to that which is essential to meet safety or performance requirements; recovering C_3F_8 from the fire protection system in conjunction with testing or servicing; and destroying or recycling C_3F_8 for later use. EPA encourages manufacturers to develop aggressive product stewardship programs to help users avoid such unnecessary emissions.

(2) Sulfur Hexafluoride (SF_6). *SF_6 is acceptable for use as a discharge test agent in military uses only.* Sulfur Hexafluoride is a nonflammable, nontoxic gas which is colorless and odorless. With a density of approximately five times that of air, it is one of the heaviest known gases. SF_6 is relatively inert, and has an atmospheric lifetime of 3,200 years, with a 100-year, 500-year, and 1,000-year GWP of 16,100, 26,110 and 32,803 respectively.

This agent has been developed by the U.S. Navy as a test gas simulant in place of halon in new halon total flooding systems on ships which have been under construction prior to identification and qualification of substitute agents. Halon systems are no longer included in designs for new ships. The Navy estimates its annual usage to be less than 10,000 pounds annually, decreasing over time. Thus, the Agency believes that the quantities involved are not significant.

While SF_6 is not currently used in the commercial sector and new halon systems are rarely installed, EPA is proposing a narrowed use limit to ensure that emissions of this agent remain minimal. The NFPA 12a and NFPA 2001 standards recommend that halon or other total flooding gases not be used in discharge testing, but that alternative methods of ensuring enclosure and piping integrity and system functioning be used. Alternative methods can often be used, such as the "door fan" test for enclosure integrity, UL 1058 testing to ensure system functioning, pneumatic test of installed piping, and a "puff" test to ensure against internal blockages in the piping network. These stringent design and testing requirements have largely obviated the need to perform a discharge test for total flood systems containing either Halon 1301 or a substitute agent.

3. Proposed Unacceptable

a. Total Flooding. (1) HFC–32. *HFC–32 is proposed unacceptable as a total flooding agent.* HFC–32 has been determined to be flammable, with a large flammability range, and is therefore inappropriate as a halon substitute when used as a pure agent. This agent was proposed acceptable in the first SNAP proposed rulemaking (58 FR 28093, May 12, 1993) but public comment received indicated agreement about the flammability characteristics of this agent. EPA is not aware of any interest in commercializing this agent as a fire suppression agent.

IV. Administrative Requirements

A. Executive Order 12866

Under Executive Order 12866, (58 FR 51735; October 4, 1993) the Agency must determine whether the regulatory

action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order."

It has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act, 5 U.S.C. 601–602, requires that federal agencies examine the effects of their regulations on small entities. Under 5 U.S.C. 604(a), whenever an agency is required to publish a final rule-making, it must prepare a regulatory flexibility analysis (RFA). Such an analysis is not required if the head of the Agency certifies that a rule will not have a significant economic effect on a substantial number of small entities, pursuant to 5 U.S.C. 605(b).

The agency believes that this final rule will not have a significant effect on a substantial number of small entities and has therefore concluded that a formal RFA is unnecessary. Because costs of the SNAP requirements as a whole are expected to be minor, the rule is unlikely to adversely affect businesses, particularly as the rule exempts small sectors and end-uses from reporting requirements and formal Agency review. In fact, to the extent that information gathering is more expensive and time-consuming for small companies, this rule may well provide benefits for small businesses anxious to examine potential substitutes to any ozone-depleting class I and class II substances they may be using, by requiring manufacturers to make information on such substitues available.

C. Paperwork Reduction Act

The EPA has determined that this proposed rule contains no information requirements subject to the Paperwork Reduction Act 44 U.S.C. 3501 *et seq.*

V. Additional Information

Contact the Stratospheric Protection Hotline at 1–800–296–1996, Monday-Friday, between the hours of 10 a.m. and 4 p.m. (EST).

For more information on the Agency's process for administering the SNAP program or criteria for evaluation of substitutes, refer to the SNAP final rulemaking published in the **Federal Register** on March 18, 1994 (59 FR 13044). **Federal Register** notices can be ordered from the Government Printing Office Order Desk (202) 783–3238; the citation is the date of publication. Notices and rulemaking under the SNAP program can also be retrieved electronically from EPA's Technology Transfer Network (TTN), Clean Air Act Amendment Bulletin Board. The access number for users with a 1200 or 2400 bps modem is (919) 541–5742. For users with a 9600 bps modem the access number is (919) 541–1447. For assistance in accessing this service, call (919) 541–5384 during normal business hours (EST).

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Reporting and recordkeeping requirments.

Dated: September 16, 1994.

Carol M. Browner,

Administrator.

Appendix A to the Preamble: Summary of Proposed Decisions

REFRIGERANTS—PROPOSED ACCEPTABLE SUBJECT TO USE CONDITIONS

End-Use	Substitute	Decision	Comments
CFC–12 Automobile Motor Vehicle Air Conditioning (Retrofit and New Equipment/NIKS).	HFC–134a, R–401C, HCFC Blend Beta.	Proposed acceptable when (1) used with unique fittings and detailed labels and (2) all CFC–12 has been removed from the system prior to retrofitting. Refer to the text for a full description..	EPA is concerned that the existence of several substitutes in this end-use may increase the likelihood of significant refrigerant cross-contamination and potential failure of both air conditioning systems and recovery/recycling equipment. In addition, a smooth transition to the use of substitutes strongly depends on the continued purity of the recycled CFC–12 supply. For the purposes of this rule, no distinction is made between "retrofit" and "drop-in" refrigerants; retrofitting a car to use a new refrigerant includes all procedures that result in the air conditioning system using a new refrigerant.

REFRIGERANTS—PROPOSED ACCEPTABLE SUBJECT TO NARROWED USE LIMITS

End-Use	Substitute	Decision	Comments
CFC–11, CFC–12, CFC–113, CFC–114, CFC–115 Non-Mechanical Heat Transfer (Retrofit and New).	C_3F_8, C_4F_{10}, C_6F_{12}, $C_6F_{11}NO$, C_6F_{14}, $C_6F_{13}NO$, C_7F_{16}, $C_7F_{15}NO$, C_8F_{18}, $C_8F_{16}O$, AND $C_9F_{21}N$.	Proposed acceptable only where no other alternatives are technically feasible due to safety or performance requirements.	Users must observe the limitations on PFC acceptability by determining that the physical or chemical properties or other technical constraints of the other available agents preclude their use. Documentation of such measures must be available for review upon request. The principal environmental characteristic of concern for PFCs is that they have high GWPs and long atmospheric lifetimes.

REFRIGERANTS—PROPOSED UNACCEPTABLE SUBSTITUTES

End-Use	Substitute	Decision	Comments
CFC–11, CFC–12, CFC–113, CFC–114, R–500 Centrifugal Chillers (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12 Reciprocating Chillers (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–11, CFC–12, R–502 Industrial Process Refrigeration (Retrofit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
CFC–12, R–502 Ice Skating Rinks (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12, R–502 Cold Storage Warehouses (Retroit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12, R–500, R–502 Refrigerated Transport (Retrofit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12, R–502 Retail Food Refrigeration (Retrofit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R-c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.

REFRIGERANTS—PROPOSED UNACCEPTABLE SUBSTITUTES—Continued

End-Use	Substitute	Decision	Comments
CFC–12, R–502 Commercial Ice Machines (Retrofit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12 Vending Machines (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12 Water Coolers (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12 Household Refrigerators (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12, R–502 Household Freezers (Retrofit and New Equipment/NIKs).	R–403B	Proposed Unacceptable.	R–403B contains R–218, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12, R–500 Residential Dehumidifiers (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
CFC–12 Motor Vehicle Air Conditioners (Retrofit and New Equipment/NIKs).	R–405A	Proposed Unacceptable.	R–405A contains R–c318, a PFC, which has an extremely high GWP and lifetime. Other substitutes exist which do not contain PFCs.
	Hydrocarbon Blend Beta.	Proposed Unacceptable.	Flammability is a serious concern. Data have not been submitted to demonstrate it can be used safely in this end-use.
	Flammable Substitutes.	Proposed Unacceptable.	The risks associated with using flammable substitutes in this end-use have not been addressed by a risk assessment.

SOLVENT CLEANING SECTOR—PROPOSED ACCEPTABLE SUBJECT TO USE CONDITIONS SUBSTITUTES

Application	Substitute	Decision	Conditions	Comments
Electronics Cleaning w/CFC–113, MCF.	HCFC–225 ca/cb ..	Acceptable	Subject to the company set exposure limit of 25 ppm of the –ca isomer.	HCFC–225 ca/cb blend is offered as a 45%–ca/55%–cb blend. The company set exposure limit of the –ca isomer is 25 ppm. The company set exposure limit of the –cb isomer is 250 ppm. It is the Agency's opinion that with the low emission cold cleaning and vapor degreasing equipment designed for this use, the 25 ppm limit of the HCFC–225 ca isomer can be met. The company is submitting further exposure monitoring data.
Precision Cleaning w/CFC–113, MCF.	HCFC–225 ca/cb ..	Acceptable	Subject to the company set exposure limit of 25 ppm of the –ca isomer.	HCFC–225 ca/cb blend is offered as a 45%–ca/55%–cb blend. The company set exposure limit of the –ca isomer is 25 ppm. The company set exposure limit of the –cb isomer is 250 ppm. It is the Agency's opinion that with the low emission cold cleaning and vapor degreasing equipment designed for this use, the 25 ppm limit of the HCFC–225 ca isomer can be met. The company is submitting further exposure monitoring data.

SOLVENT CLEANING SECTOR—PROPOSED UNACCEPTABLE SUBSTITUTES

End use	Substitute	Decision	Comments
Metals cleaning w/ CFC–113.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.
Metals cleaning w/ MCF.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.
Electronics cleaning w/CFC–113.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.
Electronics cleaning w/MCF.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.
Precision cleaning w/CFC–113.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.
Precision cleaning w/MCF.	Dibromomethane ...	Unacceptable	High ODP; other alternatives exist.

FIRE SUPPRESSION AND EXPLOSION PROTECTION—PROPOSED ACCEPTABLE SUBJECT TO USE CONDITIONS: TOTAL FLOODING AGENTS

Application	Substitute	Decision	Conditions	Comments
Halon 1301 ..... Total flooding agents	C_3F_8	Proposed acceptable where other alternatives are not technically feasible due to performance or safety requirements: a. due to their physical or chemical properties, or b. where human exposure to the extinguishing agents may approach cardiosensitization levels or result in other unacceptable health effects under normal operating conditions ..	Until OSHA establishes applicable workplace requirements, EPA proposes: For occupied areas from which personnel cannot be evacuated in one minute, use is permitted only up to concentrations not exceeding the cardiotoxicity NOAEL of 30. Although no LOAEL has been established for this product, standard OSHA requirements apply, i.e. for occupied areas from which personnel can be evacuated or egress can occur between 30 and 60 seconds, use is permitted up to a concentration not exceeding the LOAEL. All personnel must be evacuated before concentration of C_3F_8 exceeds 30%. Design concentration must result in oxygen levels of at least 16%.	The comparative design concentration based on cup burner values is approximately 8.8%. Users must observe the limitations on PFC acceptability by making reasonable efforts to undertake the following measures: (i) conduct an evaluation of foreseeable conditions of end use; (ii) determine that human exposure to the other alternative extinguishing agents may approach or result in cardiosensitization or other unacceptable toxicity effects under normal operating conditions; and (iii) determine that the physical or chemical properties or other technical constraints of the other available agents preclude their use; Documentation of such measures must be available for review upon request. The principal environmental characteristic of concern for PFCs is that they have high GWPs and long atmospheric lifetimes. Actual contributions to global warming depend upon the quantities of PFCs emitted. For additional guidance regarding applications in which PFCs may be appropriate, users should consult the description of potential uses which is included in the March 18, 1994 Rulemaking (59 FR 13043). See additional comments 1, 2, 3, 4.
	CF_3I	Proposed acceptable in normally unoccupied areas.	EPA proposes that any employee who could possibly be in the area must be able to escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.	Manufacturer has not applied for listing for use in normally occupied areas. Preliminary cardiosensitization data indicates that this agent would not be suitable for use in normally occupied areas. EPA is awaiting results of ODP calculations. See additional comments 1, 2, 3, 4.

FIRE SUPPRESSION AND EXPLOSION PROTECTION—PROPOSED ACCEPTABLE SUBJECT TO USE CONDITIONS: TOTAL FLOODING AGENTS—Continued

Application	Substitute	Decision	Conditions	Comments
	Gelled halocarbon/dry chemical suspension.	Proposed acceptable in normally unoccupied areas.	EPA proposes that any employee who could possibly be in the area must be able to escape within 30 seconds. The employer shall assure that no unprotected employees enter the area during agent discharge.	The manufacturer's SNAP application requested listing for use in unoccupied areas only. See additional comment 2
	Inert gas/powdered aerosol blend.	Proposed acceptable as a Halon 1301 substitute in normally unoccupied areas.	In areas where personnel could possibly be present, as in a cargo area, EPA proposes that the employer shall provide a pre-discharge employee alarm capable of being perceived above ambient light or noise levels for alerting employees before system discharge. The pre-discharge alarm shall provide employees time to safely exit the discharge area prior to system discharge.	The manufacturer's SNAP application requested listing for use in unoccupied areas only. See additional comment 2.

Additional Comments

1—Must conform with OSHA 29 CFR 1910 Subpart L Section 1910.160 of the U.S. Code.

2—Per OSHA requirements, protective gear (SCBA) must be available in the event personnel must enter/reenter the area.

3—Discharge testing should be strictly limited only to that which is essential to meet safety or performance requirements.

4—The agent should be recovered from the fire protection system in conjunction with testing or servicing, and recycled for later use or destroyed.

FIRE SUPPRESSION AND EXPLOSION PROTECTION—PROPOSED ACCEPTABLE SUBJECT TO NARROWED USE LIMITS: TOTAL FLOODING AGENTS

Application	Substitute	Decision	Conditions	Comments
Halon 1301 ..... Total flooding agents	C_3F_8	Proposed acceptable where other alternatives are not technically feasible due to performance or safety requirements: a. due to their physical or chemical properties, or b. where human exposure to the extinguishing agents may approach cardiosensitization levels or result in other unacceptable health effects under normal operating conditions.	Until OSHA establishes applicable workplace requirements: For occupied areas from which personnel cannot be evacuated in one minute, use is permitted only up to concentrations not exceeding the cardiotoxicity NOAEL of 30%. Although no LOAEL has been established for this product, standard OSHA requirements apply, i.e. for occupied areas from which personnel can be evacuated or egress can occur between 30 and 60 seconds, use is permitted up to a concentration not exceeding the LOAEL. All personnel must be evacuated before concentration of C_3F_8 exceeds 30%. Design concentration must result in oxygen levels of at least 16%.	The comparative design concentration based on cup burner values is approximately 8.8%. Users must observe the limitations on PFC acceptability by making reasonable efforts to undertake the following measures: (i) conduct an evaluation of foreseeable conditions of end use; (ii) determine that human exposure to the other alternative extinguishing agents may approach or result in cardiosensitization or other unacceptable toxicity effects under normal operating conditions; and (iii) determine that the physical or chemical properties or other technical constraints of the other available agents preclude their use; Documentation of such measures must be available for review upon request. The principal environmental characteristic of concern for PFCs is that they have high GWPs and long atmospheric lifetimes. Actual contributions to global warming depend upon the quantities of PFCs emitted. For additional guidance regarding applications in which PFCs may be appropriate, users should consult the description of potential uses which is included in the March 18, 1994 Final Rulemaking (58 FR 13043).
	Sulfurhexafluoride (SF_6).	Proposed acceptable as a discharge test agent in military uses only.	.....	This agent has an atmospheric lifetime greater than 1,000 years, with an estimated 100-year, 500-year, and 1,000-year GWP of 16,100, 26,110, and 32,803 respectively. Users should limit testing only to that which is essential to meet safety or performance requirements. This agent is only used to test new Halon 1301 systems.

FIRE SUPPRESSION AND EXPLOSION PROTECTION—PROPOSED UNACCEPTABLE SUBSTITUTES

Application	Substitute	Decision	Comments
Halon 1301 ... ... Total flooding agents.	HFC–32	Proposed unacceptable	Data indicate that HFC–32 is flammable and therefore is not suitable as a halon substitute.

[FR Doc 94–23678 Filed 9–23–94, 8:45 am]
BILLING CODE 6560–50–P

federal register

Monday
September 26, 1994

Part III

Department of Housing and Urban Development

Office of the Secretary

Office of the Assistant Secretary for Public and Indian Housing

Delegation and Redelegation of Authority for Issuing Loan Guarantees; Notices

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Secretary

[Docket No. D–94–1071; FR–3781–D–01]

Delegation of Authority for Issuing Loan Guarantees

AGENCY: Office of the Secretary, HUD.

ACTION: Notice of delegation of authority.

SUMMARY: Within this notice, the Secretary is delegating his authority under the Section 184 Loan Guarantees for Indian Housing program, 12 U.S.C. 1715z–13a, to the Assistant Secretary for Public and Indian Housing. In this program, the Department guarantees certain housing loans made to Indian families and Indian housing authorities.

EFFECTIVE DATE: September 19, 1994.

FOR FURTHER INFORMATION CONTACT: Dominic A. Nessi, Director, Office of Native American Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, Room B–133, 451 7th Street, SW, Washington, DC 20410, telephone (202) 755–0032 or (202) 708–0850 (voice/TDD). (These are not toll free numbers.)

SUPPLEMENTARY INFORMATION: Section 184 of the Housing and Community Development Act of 1992 (Public Law 102–550, approved October 28, 1992), codified at 12 U.S.C. 1715z–13a, authorizes the establishment of the Indian Housing Loan Guarantee Fund (the Fund) to provide access to sources of private financing to Indian families and Indian housing authorities who otherwise could not acquire housing financing because of the unique legal status of Indian trust land. In general, these lands, held in trust by the United States for the benefit of an Indian or Indian tribe, are inalienable. Trust lands under this program also include lands to which the title is held by an Indian tribe subject to a restriction against alienation imposed by the United States. Because the title to individual plots does not convey, and liens do not attach, conventional mortgage lending practices do not operate in this forum.

The Fund addresses these obstacles to mortgage financing by guaranteeing loans made to Indian families or Indian housing authorities to construct, acquire, or rehabilitate 1- to 4-family dwellings that are standard housing and are located on trust land or land located in an Indian or Alaska Native area. The guarantee of the loan will cover 100 percent of the unpaid principal and interest. Borrowers will be required to pay a 1% guarantee fee at closing. A loan term of up to 30 years is permitted by statute, but is not required.

The statute authorizes the Secretary of the Department of Housing and Urban Development to approve loans for guarantee, issue certificates as evidence of the guarantees, and carry out other responsibilities associated with the program. To facilitate the administration of this program, the Secretary is delegating all of his power and authority under section 184 to the Assistant Secretary for Public and Indian Housing.

Therefore, the Secretary delegates as follows:

Section A. Authority Delegated

The Secretary of Housing and Urban Development delegates to the Assistant Secretary for Public and Indian Housing all power and authority of the Secretary with respect to the Loan Guarantees for Indian Housing program, 12 U.S.C. 1715z–13a (Section 184 of the Housing and Community Development Act of 1992).

Authority: Section 7(d) Department of Housing and Urban Development Act, 42 U.S.C. Section 3535(d).

Dated: September 19, 1994.

Henry G. Cisneros,

Secretary.

[FR Doc. 94–23710 Filed 9–23–94; 8:45 am]

BILLING CODE 4210–32–P

Office of the Assistant Secretary for Public and Indian Housing

[Docket No. D–94–1072; FR–3781–D–02]

Redelegation of Authority for Issuing Loan Guarantees

AGENCY: Office of the Assistant Secretary for Public and Indian Housing, HUD.

ACTION: Notice of redelegation of authority.

SUMMARY: Within this notice, the Assistant Secretary for Public and Indian Housing is redelegating authority under the Section 184 Loan Guarantees for Indian Housing program, 12 U.S.C. 1715z–13a, to the Director of the Office of Native American Programs, the Deputy Director for Headquarter Operations, the Deputy Director for Field Operations, and the Administrators of Field Offices of Native American Programs. In this program, the Department guarantees certain housing loans made to Indian families and Indian housing authorities.

EFFECTIVE DATE: September 19, 1994.

FOR FURTHER INFORMATION CONTACT: Dominic A. Nessi, Director, Office of Native American Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, Room B–133, 451 7th Street SW., Washington, DC 20410, (202) 755–0032 or (202) 708–0850 (voice/TDD). (These are not toll free numbers.)

SUPPLEMENTARY INFORMATION: Section 184 of the Housing and Community Development Act of 1992 (Public Law 102–550, approved October 28, 1992), codified at 12 U.S.C. 1715z–13a, authorizes the establishment of the Indian Housing Loan Guarantee Fund (the Fund) to provide access to sources of private financing to Indian families and Indian housing authorities who otherwise could not acquire housing financing because of the unique legal status of Indian trust land. In general, these lands, held in trust by the United States for the benefit of an Indian or Indian tribe, are inalienable. Trust lands under this program also include lands to which the title is held by an Indian tribe subject to a restriction against alienation imposed by the United States. Because title to individual plots does not convey, and liens do not attach, conventional mortgage lending practices do not operate in this forum.

The Fund addresses these obstacles to mortgage financing by guaranteeing loans made to Indian families or Indian housing authorities to construct, acquire, or rehabilitate 1- to 4-family dwellings that are standard housing and are located on trust land or land located in an Indian or Alaska Native area. The guarantee of the loan will cover 100 percent of the unpaid principal and interest. Borrowers will be required to pay a 1% guarantee fee at closing. A loan term of up to 30 years is permitted by statute, but is not required.

In a delegation of authority appearing elsewhere in the **Federal Register** today, the Secretary of Housing and Urban Development has delegated all of his authority under the Section 184 Loan Guarantees for Indian Housing program, to the Assistant Secretary for Public and Indian Housing. Within this notice, the Assistant Secretary for Public and Indian Housing retains and redelegates this authority, except for certain power and authority specifically excepted from the redelegation, to the Director of the Office of Native American Programs, the Deputy Director for Headquarter Operations, the Deputy Director for Field Operations, which positions are at headquarters, and to the Administrators of Field Offices of Native American Programs, in the field.

Therefore, the Assistant Secretary for Public and Indian Housing redelegates as follows:

Section A. Authority Redelegated

1. The Assistant Secretary for Public and Indian Housing redelegates, to the Director of the Office of Native American Programs, the Deputy Director for Headquarters Operations, and the Deputy Director for Field Operations, all power and authority of the Assistant Secretary for Public and Indian Housing with respect to the Loan Guarantees for Indian Housing program, 12 U.S.C. 1715z–13a (section 184 of the Community and Development Act of 1992), except for the power and authority to issue waivers of regulations.

2. The Assistant Secretary for Public and Indian Housing redelegates, to the Administrators of Field Offices of Native American Programs, all power and authority of the Assistant Secretary for Public and Indian Housing with respect to the Loan Guarantees for Indian Housing program, 12 U.S.C. 1715z–13a (Section 184 of the Community and Development Act of 1992), except for the power and authority to issue rules, regulations, and waivers of regulations.

Authority: Section 7(d), Department of Housing and Urban Development Act, 42 U.S.C. Section 3535(d).

Dated: September 19, 1994.

Joseph Shuldiner,

Assistant Secretary for Public and Indian Housing.

[FR Doc. 94–23709 Filed 9–23–94; 8:45 am]

BILLING CODE 4210–33–P

federal register

Monday
September 26, 1994

Part IV

Department of Transportation

Research and Special Programs Administration

49 CFR Part 106, et al.

Hazardous Materials Regulations; Editorial Corrections and Clarifications; Final Rule

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 106, 107, 110, 130, 171, 172, 173, 174, 175, 176, 177, 178, 179, and 180

[Docket No. HM–189K, Amdt. Nos. 106–10, 107–32, 110–3, 130–2, 171–2, 172–127, 173–138, 174–78, 175–51, 176–35, 177–83, 178–104, 179–49, and 180–6]

RIN 2137–AC44

Hazardous Materials Regulations; Editorial Corrections and Clarifications

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final rule.

SUMMARY: In this final rule, RSPA is correcting editorial errors, making minor regulatory changes and, in response to requests for clarification, improving the clarity of certain provisions to the Hazardous Materials Regulations (HMR). In addition, RSPA is revising legal citations in the HMR based on the codification of the hazardous materials transportation laws. The intended effect of this rule is to enhance accuracy and reduce misunderstandings of the HMR. The amendments contained in this rule are minor editorial changes and do not impose new requirements.

EFFECTIVE DATE: September 26, 1994.

FOR FURTHER INFORMATION CONTACT: Jennifer Antonielli, Office of Hazardous Materials Standards, (202) 366–4488, Research and Special Programs Administration, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION:

Background

RSPA annually reviews the Hazardous Materials Regulations (HMR) to detect errors which may be causing confusion to readers. Inaccuracies corrected in this final rule include typographical errors, incorrect references to other rules and regulations in the CFR, inconsistent use of terminology, and misstatements of certain regulatory requirements. In response to inquiries RSPA received concerning the clarity of particular requirements specified in the HMR, certain other changes are made to reduce uncertainties. In addition, RSPA is revising all legal citations contained in the HMR to reflect the codification of transportation laws relating to hazardous materials under 49 U.S.C. 5101–5127.

Since these amendments do not impose new requirements, notice and public procedure are unnecessary. For the same reason, there is good cause to make these amendments effective without the customary 30-day delay following publication. This will allow the changes to appear in the next revision of 49 CFR.

The following is a section-by-section summary of the amendments made under this final rule. It does not discuss editorial corrections (e.g., typographical, capitalization, and punctuation errors) or changes to the legal citations.

Part 106

Section 106.3. Paragraph (b) is revised to reflect the correct title of the Associate Administrator for Pipeline Safety, and a new paragraph (c) is added which delegates authority to the Associate Administrator for Research, Technology and Analysis.

Appendix A to Part 106. Appendix A to part 106 is removed because it duplicates the provisions in § 106.3.

Part 107

Section 107.329. In paragraphs (a) and (b), references to "subchapter B of this chapter" are revised to read "this subchapter".

Section 107.403. In paragraph (c), references to "Director" are revised to reflect the correct title of the Associate Administrator for Hazardous Materials Safety.

Section 107.503. Paragraph (c) is revised to reflect the correct reference to the ASME Certificate of Authorization.

Part 171

Section 171.2. The term "rail freight car" is replaced with "rail car".

Section 171.7. The entry for Compressed Gas Association is revised to reflect the correct address.

Section 171.8. In the definition of "NPT", the wording "in compliance with the" is revised to read "conforming to" for consistency.

Section 171.11. In paragraph (d)(6)(i), the wording "§ 171.203(d)(1)(iii)" is revised to reflect the correct section reference.

Section 171.12. In paragraph (d)(1), the wording "§ 171.203(d)(1)(iii)" is revised to reflect the correct section reference.

Part 172

Section 172.101. All references to "the appendix" in paragraph (c)(8) are revised to read "Appendix A". In paragraph (g), the reference to "subpart D" is revised to read "subpart E". In addition, paragraph (d)(4) is amended to refer to "§ 173.150 (e) or (f)" since both provisions set forth criteria for reclassing a material as a combustible liquid.

The Hazardous Materials Table (the Table). In the Table, the entry *"Ethylene oxide and carbon dioxide mixtures,* see Carbon dioxide and ethylene oxide mixtures, etc." is removed because "Carbon dioxide and ethylene oxide mixtures" is not listed as a proper shipping name.

Section 172.102. Special Provision 14 is amended to clarify the definition of motor fuel antiknock mixtures. Special Provision 42 is removed because the same provision appears in § 173.218. In Special Provision B33, the phrase "is subject to the following requirements." is revised to read "must conform to Table 1 as follows." In paragraph (c)(7)(ii), the statement "These provisions apply only to transportation in IM portable tanks:" is removed because it duplicates the introductory text of paragraph (c)(7). Special Provision T31 is amended by correcting the abbreviation "kpa" to "kPa". Additionally, in Special Provision T31, the temperature "65 °C" is revised to read "65.6 °C".

Section 172.203. Paragraph (h)(2)(i) is amended by replacing the word "to" with the word "of" preceding the words "this subchapter".

Section 172.505. In paragraph (a), immediately following the words "portable tank," the word "and" is removed and replaced with the word "or" for consistency.

Section 172.604. In paragraph (a)(3)(i), reference to "this part 172" is revised to read "this part".

Part 173

Section 173.12. Paragraph (d)(3) is removed because labpacks are only authorized for transportation by highway. Therefore, these requirements do not apply to marine pollutants because they are not regulated when packaged in non-bulk packagings and transported by highway.

Section 173.32. The wording in paragraph (g) "bad dents" is revised to read "significant dents" for consistency with paragraph (e)(2)(ii). An amendment is made in paragraph (q) to correct the wording "greater to or equal to" to read "greater than or equal to."

Section 173.33. In paragraph (c)(1)(iii), the word "shipped" is revised to read "loaded".

Section 173.34. Paragraph (e)(18)(i) is amended to correctly reference paragraph (e)(3) instead of (a)(3).

Section 173.116. In paragraph (a) table, "LC50" is corrected to read "LC_{50}" each place it appears.

Section 173.133 In paragraph (b)(1)(iv) table, references to "Hazard Zone C" and "Hazard Zone D" are removed because these zones only apply to gases (Division 2.3) and, in the entry "III (Hazard Zone D)" in column 2, the wording "Packing Groups I and II, Hazard Zones A, B and C" is revised to read "Packing Group I, Hazard Zones A and B, and Packing Group II".

Section 173.226. In paragraph (b)(4)(ii)(A), the word "and" is removed at the end of the sentence.

Section 173.230. In paragraph (d), the reference to Division "6.2" is revised to read Division "6.1".

Section 173.243. In paragraph (b)(2), the wording "cargo tanks" is added following "DOT 412".

Section 173.315. In Note 15, the section reference for "(QT) and (NQT)" marking requirements is corrected.

Section 173.318. The word "of" is revised to read "or" in paragraph (b)(1)(ii)(A). In paragraphs (b)(2)(i) (A) and (B), the words "his" and "this" are removed and replaced with the word "a". In paragraph (b)(6)(ii), the word "tanks" is revised to read "a tank". Parentheses are removed from "(MRHT)" in paragraph (g)(2)(i).

Appendix F to Part 173. A grammatical error is corrected in paragraph 2.(e).

Part 174

Section 174.63. In paragraph (b), the wording "Federal Railroad Administrator" is revised to reflect the "Associate Administrator for Safety, FRA".

Part 175

Section 175.320. In paragraph (a) table, for the entry "High explosives", in column 3, the wording "Blasting agent n.o.s." is revised to reflect the current shipping descriptions listed in the § 172.101 Table.

Section 175.700. The second sentence is removed because it is a duplicate of the first sentence.

Part 176

Section 176.415. In paragraph (b)(2), the wording "or unloading" is removed the second time it appears.

Section 176.600. In paragraph (d), the phrase "cool a reasonably" is corrected.

Part 177

Sections 177.839, 177.840 and 177.841. In paragraph (d) of these sections, the "s" is removed from the wording "cargo tanks".

Section 177.848. In paragraph (e)(6), the word "for" is added following the word "required" and preceding the word "any".

Section 177.860 In paragraph (a), the wording "materials which is" is corrected.

Part 178

Section 178.245–5. The wording "shall comply with" is revised to read "shall conform to".

Section 178.251–1. In paragraph (c), the wording "be in compliance with" is revised to read "conform".

Section 178.255–5. In paragraph (b), the wording "Every such valve" is revised to read "Each valve".

Section 178.255–12. In paragraph (a), the wording "pounds per square inch gauge" is abbreviated to "psig".

Section 178.270–11. In paragraph (b)(1), the word "transverse" is revised to read "transversal" to modify "center of the tank". In paragraph (d)(2), the phrase "or less than or" is revised to read "to less than or".

Sections 178.271–1 and 178.272–1. In paragraph (a), the wording "comply with" is revised to read "conform to".

Section 178.337–1. In paragraph (b), the word "chapter" is revised to read "subchapter". Also, in paragraph (d), the wording "unless it be" is corrected.

Section 178.337–2. In paragraph (a)(1), the wording "comply with" is revised to read "conform to". In paragraph (c), the wording "post weld" is revised to read "postweld".

Section 178.337–18. In paragraph (a)(3), the wording "comply with" is revised to read "conform to".

Section 178.348–10. In paragraph (d)(3), in the last sentence, all text after the word "acceptable" is removed.

Section 178.350–3. In paragraph (b), the section reference "§ 173.24" is revised to read "§ 172.310".

Part 180

Section 180.405. In paragraph (f)(6), the word "must" is removed and replaced with the word "shall".

Section 180.407. In paragraph (d)(4), the word "tank" is added following the word "cargo".

Rulemaking Analyses and Notices

Executive Order 12866 and DOT Regulatory Policies and Procedures

This final rule is not considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was not subject to review by the Office of Management and Budget. This rule is not significant according to the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034). This final rule does not require a Regulatory Impact Analysis, or a regulatory evaluation, or an environmental assessment or impact statement under the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*).

Executive Order 12612

This final rule has been analyzed in accordance with the principles and criteria in Executive Order 12612 ("Federalism") and does not have sufficient federalism impacts to warrant the preparation of a federalism assessment.

Regulatory Flexibility Act

I certify that this final rule will not have a significant economic impact on a substantial number of small entities. This rule makes minor editorial changes which will not impose any new requirements on persons subject to the HMR; thus, there are no direct or indirect adverse economic impacts for small units of government, businesses, or other organizations.

Paperwork Reduction Act

There are no new information collection requirements in this final rule.

List of Subjects

49 CFR Part 106

Administrative practice and procedure, Hazardous materials transportation, Oil, Pipeline safety.

49 CFR Part 107

Administrative practice and procedure, Hazardous materials transportation, Packaging and containers, Penalties, Reporting and recordkeeping requirements.

49 CFR Part 110

Disaster assistance, Education, Emergency preparedness, Grant programs—Environmental protection, Grant programs—Indians, Hazardous materials transportation, Hazardous substances, Indians, Reporting and recordkeeping requirements.

49 CFR Part 130

Oil, Response plans, Reporting and recordkeeping requirements, Transportation.

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

49 CFR Part 172

Hazardous materials transportation, Hazardous waste, Labeling, Markings, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 173

Hazardous materials transportation, Packaging and containers, Radioactive materials, Reporting and recordkeeping requirements, Uranium.

49 CFR Part 174

Hazardous materials transportation, Radioactive materials, Railroad safety

49 CFR Part 175

Air carriers, Hazardous materials transportation, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 176

Hazardous materials transportation, Maritime carriers, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 177

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 178

Hazardous materials transportation, Motor vehicle safety, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 179

Hazardous materials transportation, Railroad safety, Reporting and recordkeeping requirements.

49 CFR Part 180

Hazardous materials transportation, Motor carriers, Motor vehicle safety, Packaging and containers, Reporting and recordkeeping requirements.

In consideration of the foregoing, 49 CFR Chapter I is amended as follows:

PART 106—RULEMAKING PROCEDURES

1. The parenthetical authorities at the end of any sections in part 106 are removed and the authority citation is revised to read as follows:

Authority: 33 U.S.C. 1321; 49 U.S.C. 5101–5127, 40113, 60101–60125; 49 CFR 1.53.

2. In § 106.3, paragraph (b) is revised and a new paragraph (c) is added to read as follows:

§ 106.3 Delegations.

* * * * *

(b) Associate Administrator for Pipeline Safety.

(c) Associate Administrator for Research, Technology and Analysis.

Appendix A [Removed]

3. Appendix A to part 106 is removed.

PART 107—HAZARDOUS MATERIALS PROGRAM PROCEDURES

4. The parenthetical authorities at the end of any sections in part 107 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127, 44701, 49 CFR 1.45, 1.53.

§ 107.3 [Amended]

5. In § 107.3, the following changes are made:

a. In the first sentence of introductory text, the wording "Section 103 of the Act" is revised to read "49 U.S.C. 5102".

b. The term "Act" and its definition are removed.

c. For the definition "*Person*", in paragraph (2), the wording "sections 110 and 111 of the Act (49 App. U.S.C. 1809–1810)" is revised to read "49 U.S.C. 5123 and 5124".

d. For the definition "*State*", the wording "section 121 (49 App. U.S.C. 1819)" is revised to read "49 U.S.C. 5119".

6. In addition, in § 107.3, a new definition for "*Federal hazardous material transportation law*" is added in alphabetical order to read as follows:

§ 107.3 Definitions.

* * * * *

Federal hazardous material transportation law means 49 U.S.C. 5101 *et seq.*

* * * * *

§ 107.101 [Amended]

7. In § 107.101, the wording "Hazardous Materials Transportation Act" is removed and replaced with "Federal hazardous material transportation law".

§ 107.103 [Amended]

8. In 107.103, the following changes are made:

a. In paragraph (a), the wording "46 CR" is revised to read "46 CFR".

b. In paragraph (b)(10), a semicolon is added immediately following the word "reasons".

§ 107.111 [Amended]

9. In § 107.111, in paragraph (b)(3), a semicolon is added immediately following the word "applicant" and preceding the word "and".

§ 107.201 [Amended]

10. In § 107.201, the following changes are made:

a. In paragraph (a)(1), the wording "section 105(a)(4) or section 112(a)(1) or (a)(2) of the Act (49 App. U.S.C. 1804 and 1811)" is revised to read "49 U.S.C. 5125".

b. In paragraph (a)(2), the wording "section 105(a)(4) or section 112(a)(1) or (a)(2) of the Act" is revised to read "49 U.S.C. 5125".

c. In paragraph (c), the wording "the Act" is revised to read "Federal hazardous material transportation law"

11. In § 107.202, paragraphs (a), (b), and (c) are revised to read as follows:

§ 107.202 Standards for determining preemption.

(a) Except as provided in 49 U.S.C. 5125(c) and unless otherwise authorized by Federal law, any law, regulation, order, ruling, provision, or other requirement of a State, political subdivision, or Indian tribe, which concerns the following subjects and which is not substantively the same as any provision of the Federal hazardous materials transportation law or any regulation issued thereunder, is preempted:

(1) The designation, description, and classification of hazardous material.

(2) The packing, repacking, handling, labeling, marking, and placarding of hazardous material.

(3) The preparation, execution, and use of shipping documents pertaining to hazardous material and requirements related to the number, content, and placement of those documents.

(4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material.

(5) The design, manufacturing, fabrication, marking, maintenance, reconditioning, repairing, or testing of a packaging or a container which is represented, marked, certified, or sold as qualified for use in the transportation of hazardous material.

(b) Except as provided in § 107.221 and unless otherwise authorized by Federal law, any requirement of a State or political subdivision or Indian tribe is preempted if—

(1) Complying with a requirement of the State, political subdivision, or Indian tribe and a requirement under the Federal hazardous material transportation law or regulations issued thereunder is not possible;

(2) The requirement of the State, political subdivision, or Indian tribe, as applied or enforced, is an obstacle to accomplishing and carrying out the Federal hazardous material transportation law or regulations issued thereunder; or

(3) It is preempted under 49 U.S.C. 5125 (b) or (c).

(c) A State, political subdivision, or Indian tribe may impose a fee related to transporting hazardous material only if the fee is fair and used for a purpose

related to transporting hazardous material, including enforcement and planning, developing and maintaining a capability for emergency response.

* * * * *

§ 107.203 [Amended]

12. In § 107.203, the following changes are made:

a. In paragraph (b)(3), the wording "Act or the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder".

b. In paragraph (c), the wording "Act or any regulation issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder".

13. In addition, in § 107.203, paragraph (a) is revised to read as follows:

§ 107.203 Application.

(a) With the exception of highway routing matters covered under 49 U.S.C. 5125(c), any person, including a State, political subdivision, or Indian tribe, directly affected by any requirement of a State, political subdivision, or Indian tribe, may apply to the Associate Administrator for Hazardous Materials Safety for a determination of whether that requirement is preempted by § 107.202 (a) or (b).

* * * * *

§ 107.209 [Amended]

14. In § 107.209, the following changes are made:

a. In paragraph (b), the wording "Act or the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder".

b. In paragraph (e), the wording "Act" is revised to read "Federal hazardous material transportation law" each place it appears.

§ 107.215 [Amended]

15. In § 107.215, the following changes are made:

a. In the first sentence of paragraph (a) introductory text, the wording "section 105(b) of the Act (49 App. U.S.C. 1804(b))" is revised to read "49 U.S.C. 5125(c)".

b. Also in paragraph (a) introductory text, the wording "Act or the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder".

c. In paragraph (a)(1), the wording "Act or regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder"

d. In paragraphs (b)(4), (b)(5), and (b)(6), the wording "Act or the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder" each place it appears.

§ 107.219 [Amended]

16. In § 107.219, in paragraphs (c)(1) and (c)(2), the wording "Act or the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder" each place it appears.

§ 107.221 [Amended]

17. In § 107.221, the following changes are made:

a. In paragraph (b) introductory text, in the first sentence, the wording "Act and the regulations issued under the Act" is revised to read "Federal hazardous material transportation law or the regulations issued thereunder".

b. In paragraph (e), the wording "under the Act" is revised to read "under the Federal hazardous material transportation law".

18. In § 107.299, the definitions are placed in alphabetical order and the definition of "*Investigation*" is revised to read as follows:

§ 107.299 Definitions.

* * * * *

Investigation includes investigations authorized under 49 U.S.C. 5121 and inspections authorized under 49 U.S.C. 5118 and 5121.

§ 107.305 [Amended]

19. In § 107.305, the following changes are made:

a. In paragraphs (a) and (b), the wording "section 109(a) of the Act" is revised to read "49 U.S.C. 5121(a)" each place it appears.

b. In paragraph (b), in the second sentence, the wording "Section 109(b) of the Act" is revised to read "49 U.S.C. 5121(c)".

§ 107.311 [Amended]

20. In § 107.311, in paragraphs (a) and (b)(1), the wording "Act, an order issued under the Act" is revised to read "Federal hazardous material transportation law, an order issued thereunder" each place it appears.

§ 107.329 [Amended]

21. In § 107.329, the following changes are made:

a. In paragraphs (a) and (b), each reference to "subchapter B of this chapter" is revised to read "this subchapter".

b. Also, in paragraphs (a) and (b), the wording "Act, an order issued under the Act" is revised to read "Federal hazardous material transportation law, an order issued thereunder" each place it appears.

§ 107.333 [Amended]

22. In § 107.333, the wording "Act or an order or regulation issued under the Act" is revised to read "Federal hazardous material transportation law or an order or regulation issued thereunder".

§ 107.337 [Amended]

23. In § 107.337, the following changes are made:

a. The wording "provision of the Act" is revised to read "provision of the Federal hazardous material transportation law".

b. At the end of the section, the wording "section 111(a) of the Act" is revised to read "49 U.S.C. 5122(a)".

§ 107.339 [Amended]

24. In § 107.339, the wording "section 111(b) of the Act" is revised to read "49 U.S.C. 5122(b)".

Subparts C, D, and E of Part 107—[Amended]

25. The authority citations for subparts C, D, and E of part 107 are removed.

§ 107.403 [Amended]

26. In § 107.403, in paragraph (c), the word "Director" is removed and replaced with "Associate Administrator for Hazardous Materials Safety", each place it appears.

§ 107.503 [Amended]

27. In § 107.503, in paragraph (c), in the last sentence, the wording "ASME Certification of Authorization" is revised to read "ASME Certificate of Authorization".

§§ 107.301, 107.307, 107.309, 107.335 [Amended]

28. In addition to the amendments set forth above, §§ 107.301, 107.307(a), 107.309(a), and 107.335 are amended by removing the word "Act" and inserting in its place "Federal hazardous material transportation law" each place it appears.

PART 110—HAZARDOUS MATERIALS PUBLIC SECTOR TRAINING AND PLANNING GRANTS

29. The authority citation for part 110 is revised to read as follows:

Authority: 49 U.S.C. 5101–5127, 49 CFR 1.53.

30. In § 110.20, the introductory paragraph and the definition of

"National curriculum" are revised to read as follows:

§ 110.20 Definitions.

Unless defined in this part, all terms defined in 49 U.S.C. 5102 are used in their statutory meaning and all terms defined in 49 CFR part 18 and OMB Circular A–102, with respect to administrative requirements for grants, are used as defined therein. Other terms used in this part are defined as follows:

* * * * *

National curriculum means the curriculum required to be developed under 49 U.S.C. 5115 and necessary to train public sector emergency response and preparedness teams, enabling them to comply with performance standards as stated in 49 U.S.C. 5115(c).

* * * * *

§ 110.30 [Amended]

31. In § 110.30, in paragraph (c) introductory text, the word "Tribe" is revised to read "tribe".

32. In addition, in § 110.30, paragraph (a) introductory text is revised to read as follows:

§ 110.30 Grant application.

(a) *General.* An applicant for a planning or training grant shall use only the standard application forms approved by the Office of Management and Budget (OMB) (SF–424 and SF–424A) under the Paperwork Reduction Act of 1980 (44 U.S.C. 3502). Applicants are required to submit an original and two copies of the application package to: Grants Manager, Research and Special Programs Administration, U.S. Department of Transportation, 400 7th Street, SW., Washington, DC 20590–0001. Applications received on or before January 1st and July 1st of each year will be considered in that cycle of the semi-annual review and award process. An initial round of the review and award process will consider applications received on or before November 15, 1992. Requests and continuation applications must include an original and two copies of the affected pages; previously submitted pages with information that is still current do not have to be resubmitted. The application must include the following:

* * * * *

§ 110.60 [Amended]

33. In § 110.60, in paragraph (a) introductory text, in the second sentence, the wording "hard match" is revised to read "hard-match"

§ 110.120 [Amended]

34. In § 110.120, in the last sentence, the wording "HMTUSA Grants Manager" is revised to read "Grants Manager".

PART 130—OIL SPILL PREVENTION AND RESPONSE PLANS

35. The authority citation for part 130 is revised to read as follows:

Authority: 33 U.S.C. 1321; 49 CFR 1.53.

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

36. The parenthetical authorities at the end of any sections in part 171 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 171.1 [Amended]

37. In § 171.1, the following changes are made:

a. In paragraph (c), the wording "of the Act, all orders and regulations issued under the Act" is revised to read "of the Federal hazardous material transportation law, all orders and regulations issued thereunder".

b. In addition, in paragraph (c), the wording "by the Act" is revised to read "by the Federal hazardous material transportation law".

§ 171.2 [Amended]

38. In § 171.2, the following changes are made:

a. In paragraph (f)(1), the wording "under the Act" is revised to read "under the Federal hazardous material transportation law".

b. In paragraphs (f)(2) and (g)(2), the term "rail freight car" is revised to read "rail car", each place it appears.

c. In paragraph (g)(1), the wording "Any marking label" is revised to read "Any marking, label".

d. Also in paragraph (g)(1), the wording "Act, or a regulation issued under the Act" is revised to read "Federal hazardous material transportation law, or the regulations issued thereunder".

39. In § 171.3, the Note in paragraph (b)(3)(iii) is revised to read as follows:

§ 171.3 Hazardous waste.

* * * * *

(b) * * *

(3) * * *

(iii) * * *

Note: Federal law specifies penalties up to $250,000 fine for an individual and $500,000 for a company and 5 years imprisonment for the willful discharge of hazardous waste at other than designated facilities. 49 U.S.C. 5124.

* * * * *

§ 171.7 [Amended]

40. In § 171.7, the paragraph (a)(3) table, in the entry for Compressed Gas Association, Inc., the address "1235 Jefferson Davis Highway" is revised to read "1725 Jefferson Davis Highway".

§ 171.8 [Amended]

41. In § 171.8, the following changes are made:

a. For the definition of *"NPT"*, the wording "in compliance with the" is revised to read "conforming to".

b. For the definition of *"Person"*, in paragraph (2), the wording "sections 110 and 111 of the Hazardous Materials Transportation Act (49 App. U.S.C. 1809–1810)" is revised to read "49 U.S.C. 5123 and 5124".

42. In addition, in § 171.8, the definition of *"Federal hazardous materials transportation law"* is added in alphabetical order to read as follows:

§ 171.8 Definitions.

* * * * *

Federal hazardous material transportation law means 49 U.S.C. 5101 *et seq.*

* * * * *

§ 171.11 [Amended]

43. In § 171.11, in paragraph (d)(6)(i), the section reference "§ 172.203(d)(1)(iii)" is revised to read "§ 172.203(d)(4)".

§ 171.12 [Amended]

44. In § 171.12, in paragraph (d)(1), the section reference "§ 172.203(d)(1)(iii)" is revised to read "§ 172.203(d)(4)".

PART 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, AND TRAINING REQUIREMENTS

45. The authority citation for part 172 continues to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 172.101 [Amended]

46. In § 172.101, the following changes are made:

a. In paragraph (c)(8) introductory text and paragraph (c)(8)(ii), the wording "the appendix" is revised to read "Appendix A" each place it appears.

b. In paragraph (d)(4), the reference "§ 173.150 (f)" is revised to read "§ 173.150(e) or (f)".

c. In paragraph (g), the reference "subpart D" is revised to read "subpart E"

d. In the Hazardous Materials Table, the following changes are made:

1. The entry "*Ethylene oxide and carbon dioxide mixtures*, see Carbon dioxide and ethylene oxide mixtures, etc." is removed.

2. For the entry "*Mobility aids*, see Wheel chair, electric.", in Column (2), the colon and period are removed at the end of the proper shipping name.

Appendix A to § 172.101 [Amended]

47. In appendix A to § 172.101, the following changes are made:

a. In the introductory text, in paragraph 1., in the second sentence, the wording "the Hazardous Materials Transportation Act" is revised to read "49 U.S.C. 5101–5127".

b. In the introductory text, in paragraph 1., in the last sentence, the wording "the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.)" is revised to read "49 U.S.C. 5101–5127".

c. In Table 1—Hazardous Substances Other Than Radionuclides, the following changes are made:

1. For the entry "Cresols", in column 2, the wording "Phenol, methyl-" is removed the second time it appears.

2. For the entry "DDT", in column 2, the word "Bezene" is revised to read "Benzene".

3. For the entry "Tetrachloroethane", in column 2, the wording "1,1,2,-Tetrachloroethane" is revised to read "1,1,2,2,-Tetrachloroethane".

§ 172.102 [Amended]

48. In § 172.102, the following changes are made:

a. In paragraph (c)(1), in Special Provision 14, a parenthetical mark is added following "dichloride" and the parenthetical mark following "stabilizers" is removed.

b. In paragraph (c)(1), Special Provision 42 is removed.

c. In paragraph (c)(3), in Special Provision B5, in the first sentence, the word "the" preceding the word "transport" is removed.

d. In paragraph (c)(3), in Special Provision B32, a comma is added to immediately follow "MC 331".

e. In paragraph (c)(3), in Special Provision B33, in the first sentence, the phrase "are subject to the following requirements." is revised to read "must conform to Table 1 of this Special Provision.".

f. In paragraph (c)(3), in Special Provision B90, in the first sentence, the wording "Steel tank" is revised to read "Steel tanks".

g. In paragraph (c)(7)(ii), the introductory text "These provisions apply only to transportation in IM portable tanks:" is removed.

h. In paragraph (c)(7)(ii), in Special Provision T31, the wording "65 kpa (9.4 psia) at 65 °C (150 °F)" is revised to read "65 kPa (9.4 psia) at 65.6 °C (150 °F)".

§ 172.203 [Amended]

49. In § 172.203, the following changes are made:

a. In paragraph (e)(2), the wording "171.8" is revised to read "§ 171.8".

b. In paragraph (h)(2)(i), the word "to" preceding the wording "this subchapter" is revised to read "of".

c. In paragraph (k) introductory text, in the second sentence, the wording "(contains caprylyl chloride)" is revised to read "(contains Caprylyl chloride)".

d. In paragraph (k)(3), in the list of proper shipping names, for the proper shipping name, "Corrosive solids, self heating, n.o.s.", a hyphen is added between the words "self" and "heating".

§ 172.334 [Amended]

50. In § 172.334, in paragraph (b)(3), a comma is added following "(c)(5)".

§ 172.505 [Amended]

51. In § 172.505, in paragraph (a), in the first sentence, immediately following the words "portable tank," the word "and" is removed and replaced with the word "or".

§ 172.600 [Amended]

52. In § 172.600, in paragraph (c)(2), the word "state" is revised to read "State".

§ 172.604 [Amended]

53. In § 172.604, in paragraph (a)(3)(i), the wording "this part 172" is revised to read "this part".

Appendix A to Part 172 [Amended]

54. In Appendix A to part 172, in the first sentence, the wording "L'Eclariage" is revised to read "L'Eclairage."

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

55. The parenthetical authorities at the end of any sections in part 173 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 173.11 [Amended]

56. In § 173.11, in paragraph (b)(4), the comma is removed after the wording "tank car".

§ 173.12 [Amended]

57. In § 173.12, the following changes are made:

a. In paragraph (d)(1), the word "and" is added immediately following the semicolon at the end of the paragraph.

b. In paragraph (d)(2), the wording "; and" is removed and replaced with a period.

c. Paragraph (d)(3) is removed.

§ 173.27 [Amended]

58. In § 173.27, the following changes are made:

a. In paragraph (f), Table 2., in the row entitled "Solids: greater than 15 kg, not greater than 50 kg", in column 3, the quantity limit of "5 g" is revised to read "5 kg".

b. In paragraph (g)(1), the word "headings" is revised to read "headrings".

§ 173.32 [Amended]

59. In § 173.32, the following changes are made:

a. In paragraph (g), the wording "bad dents" is revised to read "significant dents".

b. In paragraph (q) introductory text, the phrase "greater to or equal to" is amended to read "greater than or equal to".

§ 173.33 [Amended]

60. In § 173.33, the following changes are made:

a. In paragraph (c)(1)(iii), the word "shipped" is revised to read "loaded" each place it appears.

b. In paragraph (c)(1)(iv), the period following the reference "(c)(1)(i)" is removed and replaced with a comma.

§ 173.34 [Amended]

61. In § 173.34, in paragraph (e)(18)(i), in the first sentence, the reference "(a)(3)" is revised to read "(e)(3)".

Subpart D—[Amended]

62. In the subpart D title, the words "other than" are revised to read "Other Than".

§ 173.116 [Amended]

63. In § 173.116, in the paragraph (a) table, in column 2, the wording "LC50" is revised to read "LC_{50}" each place it appears.

§ 173.133 [Amended]

64. In § 173.133, in the paragraph (b)(1)(iv) table, in column 1, in the third and fourth entries, the wording "(Hazard Zone C)." and "(Hazard Zone D)" are removed and in column 2, in the last entry, the wording "Packing Groups I and II, Hazard Zones A, B and C" is revised to read "Packing Group I, Hazard Zones A and B, and Packing Group II".

§ 173.217 [Amended]

65. In § 173.217, in paragraph (a), in the last sentence, the wording "2–3 kg

(5 lbs)" is revised to read "2.3 kg (5 lbs)".

§ 173.226 [Amended]

66. In § 173.226, in paragraph (b)(4)(ii)(A), the word "and" is removed at the end of the paragraph.

§ 173.227 [Amended]

67. In § 173.227, in the section heading, the period following "Division 6.1" is removed and replaced with a comma.

§ 173.230 [Amended]

68. In § 173.230, in paragraph (d), the reference "6.2" is revised to read "6.1".

§ 173.243 [Amended]

69. In § 173.243, in paragraph (b)(2), the wording "cargo tanks" is added immediately following "DOT 412".

§ 173.301 [Amended]

70. In § 173.301, in paragraph (g) introductory text, the period following the word "methods" is removed and replaced with a colon.

§ 173.309 [Amended]

71. In § 173.309, the following changes are made:

a. In paragraph (a)(1), the word "non-corrosive" is revised to read "noncorrosive".

b. In paragraphs (a)(3)(iii), (a)(4)(ii), and (b)(2), the wording "kpa" is revised to read "kPa" each place it appears.

c. In paragraph (a)(4)(ii), the reference "55 °C— (130 °F)" is revised to read "55 °C (130 °F)" each place it appears.

§ 173.315 [Amended]

72. In § 173.315, in the paragraph (a) table, in Note 15, in the next to last sentence, the section reference "§ 172.328(d)" is revised to read "§ 172.328(c)".

§ 173.318 [Amended]

73. In § 173.318, the following changes are made:

a. In paragraph (b)(1)(ii)(A), the wording "One of more" is revised to read "One or more".

b. In paragraphs (b)(2)(i) (A) and (B), the words "his" and "this", respectively, are removed and replaced with the word "a".

c. In paragraph (b)(6)(ii), the wording "On tanks" is revised to read "On a tank".

d. In paragraph (g)(2)(i), the wording "an (MRHT)" is revised to read "an MRHT".

Subpart I—[Amended]

74. The authority citation for subpart I to part 173 is removed.

Appendix A to Part 173—[Amended]

75. In Appendix A to part 173, in paragraph 2., a comma is added immediately after the wording "surgical gauze".

Appendix F to Part 173—[Amended]

76. In Appendix F to part 173, in paragraph 2.(e), in the third sentence, the phrase "combustion are observed" is revised to read "combustion is observed".

PART 174—CARRIAGE BY RAIL

77. The authority citation for part 174 continues to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 174.63 [Amended]

78. In § 174.63, in paragraph (b), the wording "Federal Railroad Administrator" is revised to read "Associate Administrator for Safety, FRA".

§ 174.100 [Amended]

79. In § 174.100, in the section heading and in the first sentence of paragraph (b), the "I" is revised to read "1".

PART 175—CARRIAGE BY AIRCRAFT

80. The parenthetical authorities at the end of any sections in part 175 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 175.320 [Amended]

81. In § 175.320, in the table in paragraph (a), in the entry "High explosives", in column 2, the wording "Division 1.1 or 1.2 (Class A) explosives" is revised to read "Class 1 (explosive) materials" and, in column 3, the wording "Blasting agent n.o.s." is revised to read "Blasting explosives (Division 1.1D or 1.5D), or Blasting agent (Division 1.5D), Very insensitive explosive substances, n.o.s., or Substances, EVI, n.o.s. (Division 1.5D), Extremely insensitive explosive articles or Articles, EEI (Division 1.6N)".

§ 175.700 [Amended]

82. In § 175.700, in paragraph (b), the second sentence is removed.

PART 176—CARRIAGE BY VESSEL

83. The parenthetical authorities at the end of any sections in part 176 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 176.13 [Amended]

84. In § 176.13, in paragraph (c), the reference "§ 172.704(c)" is revised to read "§ 172.704(d)".

Subpart F of Part 176—[Amended]

85. The authority citation in subpart F of part 176 is removed.

§ 176.415 [Amended]

86. In § 176.415, in paragraph (b)(2), the wording "or unloading" is removed, the second time it appears.

§ 176.600 [Amended]

87. In § 176.600, in paragraph (d), the wording "cool a reasonably" is revised to read "cool as reasonably".

PART 177—CARRIAGE BY PUBLIC HIGHWAY

88. The parenthetical authorities at the end of any sections in part 177 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 177.838 [Amended]

89. In § 177.838, the following changes are made:

a. In paragraph (g), the wording "3.6 kg (7.9 pounds)" is revised to read "3.6 kg (8 pounds)".

b. In paragraph (h), the word "pyroforic" is revised to read "pyrophoric" each place it appears.

§ 177.839 [Amended]

90. In § 177.839, in paragraph (d) introductory text, in the first sentence, the wording "cargo tanks" is revised to read "cargo tank", each place it appears.

§ 177.840 [Amended]

91. In § 177.840, in paragraph (d), in the first sentence, the wording "cargo tanks" is revised to read "cargo tank".

§ 177.841 [Amended]

92. In § 177.841, in paragraph (d) introductory text, in the first sentence, the wording "cargo tanks" is revised to read "cargo tank", each place it appears.

§ 177.848 [Amended]

93. In § 177.848, in paragraph (e)(6), in the second sentence, the word "for" is added following the word "required" and preceding the word "any".

§ 177.860 [Amended]

94. In § 177.860, the following changes are made:

a. In paragraph (a) introductory text, in the first sentence, the wording "materials which is" is revised to read "material which is".

b. In paragraph (b), the wording "Division 6 1" is revised to read "Division 6.1".

PART 178—SPECIFICATIONS FOR PACKAGINGS

95. The parenthetical authorities at the end of any sections in part 178 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 178.245–5 [Amended]

96. In § 178.245–5, in paragraph (b), the wording "shall comply with" is revised to read "shall conform to".

§ 178.255–5 [Amended]

97. In § 178.255–5, in paragraph (b), in the second sentence, the wording "Every such valve" is revised to read "Each valve".

§ 178.255–12 [Amended]

98. In § 178.255–12, in the first sentence of paragraph (a), "pounds per square inch gauge" is revised to read "psig".

§ 178.270–9 [Amended]

99. In § 178.270–9, in the second sentence, the word "obround" is revised to read "round".

§ 178.270–11 [Amended]

100. In § 178.270–11, the following changes are made:

a. In paragraph (b)(1) introductory text, in the last sentence, the word "transverse" is revised to read "transversal".

b. In paragraph (d)(2), in the first sentence, the phrase "or less than or" is revised to read "to less than or".

§ 178.271–1 [Amended]

101. In § 178.271–1, in paragraph (a), the wording "comply with" is revised to read "conform to".

§ 178.272–1 [Amended]

102. In § 178.272–1, in paragraph (a), the wording "comply with" is revised to read "conform to".

§ 178.337–1 [Amended]

103. In § 178.337–1, the following changes are made:

a. In paragraph (b), the word "chapter" is revised to read "subchapter".

b. In paragraph (d), the wording "unless it be" is revised to read "unless".

§ 178.337–2 [Amended]

104. In § 178.337–2, the following changes are made:

a. In paragraph (a)(1), the wording "comply with" is revised to read "conform to".

b. In paragraph (c), in the last sentence, the wording "post weld" is revised to read "postweld".

§ 178.337–3 [Amended]

105. In § 178.337–3, in paragraph (c)(3)(i), the colon following the word "pressure" is removed and replaced with a semicolon.

§ 178.337–11 [Amended]

106. In § 178.337–11, in paragraph (a)(2)(i), in the third sentence, the wording "loading unloading" is revised to read "loading/unloading".

§ 178.337–18 [Amended]

107. In § 178.337–18, in paragraph (a)(3), in the first sentence, the wording "comply with" is revised to read "conform to".

§ 178.338–1 [Amended]

108. In § 178.338–1, in paragraph (c)(1), in the third sentence, the quotation marks before and after the wording "design pressure" are removed.

§ 178.345–3 [Amended]

109. In § 178.345–3, the following changes are made:

a. In paragraph (e), the reference "178.347–2" is revised to read "§ 178.347–2".

b. In paragraph (g) introductory text, the period is removed following the word "requirements" and replaced with a colon.

§ 178.345–7 [Amended]

110. In § 178.345–7, in paragraph (a)(2), in the last sentence, the words "conical shall" is revised to read "conical shell".

§ 178.345–14 [Amended]

111. In § 178.345–14, the following changes are made:

a. In paragraph (b)(6), the period after the parenthetical wording "(Water cap.)" is removed and replaced with a comma.

b. In paragraph (b)(15), a period is added following the word "feet".

c. In paragraph (c)(3), the semicolon following the parenthetical wording"(CT mfr.)" is removed and replaced with a period.

d. In paragraph (c)(6), the parenthetical wording "(Max load. rate, GPM)" is revised to read "(Max. load rate, GPM)".

e. In paragraph (c)(7), the parenthetical wording "(Max. unload. rate, GPM)" is revised to read "(Max. unload rate, GPM)".

§ 178.347–2 [Amended]

112. In § 178.347–2, the following changes are made:

a. In paragraph (a), in the titles of Tables I and II, a period between the words "(MS)" and "HIGH" is removed and replaced with a comma, each place it appears.

b. In Table I, in the column "Over 18 to 22", for the entry "Thickness (AL)", "0 187" is revised to read "0.187".

§ 178.348–10 [Amended]

113. In § 178.348–10, in paragraph (d)(3), in the last sentence, the phrase "as this will provide a great vent capacity requirement" is removed.

§ 178.350–3 [Amended]

114. In § 178.350–3, in paragraph (b), the reference "§ 173.24" is revised to read "§ 172.310".

PART 179—SPECIFICATIONS FOR TANK CARS

115. The parenthetical authorities at the end of any sections in part 179 are removed and the authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

Subpart F—[Amended]

116. The authority citation for subpart F to part 179 is removed.

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

117. The authority citation is revised to read as follows:

Authority: 49 U.S.C. 5101–5127; 49 CFR 1.53.

§ 180.405 [Amended]

118. In § 180.405, in paragraph (f)(6), the word "must" is revised to read "shall".

§ 180.407 [Amended]

119. In § 180.407, in paragraph (d)(4), the word "tank" is added following the word "cargo".

§ 180.415 [Amended]

120. In § 180.415, in paragraph (b), in the last sentence, the colons preceding the wordings "P for pressure" and "L for lining" are removed and replaced with semicolons.

Issued in Washington, DC on September 14, 1994, under authority delegated in 49 CFR part 1.

D.K. Sharma,

Administrator.

[FR Doc. 94–23301 Filed 9–23–94; 8:45 am]

BILLING CODE 4910–60–P

Federal Register

Monday
September 26, 1994

Part V

Department of Transportation

Federal Aviation Administration

14 CFR Parts 91 and 135
Air Tour Operators in the State of Hawaii; Final Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 91 and 135

[Docket No. 27919; Special Federal Aviation Regulation (SFAR) No. 71]

RIN 2120–AF53

Air Tour Operators in the State of Hawaii

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: This action establishes certain procedural, operational and equipment requirements for air tour operators in the State of Hawaii. This emergency rule is necessary because of an escalation of air tour accidents. The regulation is intended to enhance the safety of air tour operations within the State.

DATES: This final rule is effective October 26, 1994. Comments must be received on or before December 27, 1994.

ADDRESSES: Send comments on this final rule in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC–200), Docket No. 27919, 800 Independence Ave., SW., Washington, DC 20591. Comments delivered must be marked Docket No. 27919. Comments may be examined in room 915G weekdays between 8:30 a.m. and 5 p.m., except on Federal holidays.

Commenters who wish the FAA to acknowledge the receipt of their comments must submit with their comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 27919." The postcard will be date stamped by the FAA and returned to the commenter.

FOR FURTHER INFORMATION CONTACT: Brian Calendine, Air Transportation Division, AFS–200, Federal Aviation Administration, 800 Independence Avenue, S.W., Washington, D.C. 20591; Telephone (202) 267–8166.

SUPPLEMENTARY INFORMATION:

Availability of Final Rule

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA–220, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267–3485. Requests should be identified by the docket number of this rule.

Persons interested in being placed on a mailing list for notices of proposed rulemaking should request a copy of Advisory Circular No. 11–2A, "Notice of Proposed Rulemaking Distribution System," which describes the application procedure.

Background

The Air Tour Industry

Since 1980, the air tour industry in the State of Hawaii has grown rapidly, particularly on the islands of Oahu, Kauai, Maui, and Hawaii. The growth of the tourist industry, the beauty of the islands, and the inaccessibility of some areas on the islands has generated tremendous growth in the number of air tour flights. In 1982, there were approximately 63,000 helicopter and 11,000 airplane air tour flights. By 1991, these numbers had increased to approximately 101,000 for helicopters and 18,000 for airplanes. After a slight decline due to Hurricane Iniki in 1992, air tour flights in 1994 are projected to reach the 1991 levels. In Hawaii, the air tour industry carries about 400,000 passengers annually. Thirty-eight operators are conducting air tours within the State of Hawaii, using approximately 97 helicopters and 16 fixed-wing aircraft. During the 9-year period between 1982 and 1991, there were eight fatal accidents with 24 fatalities. The accident data shows an escalation of fatal accidents during the 3-year period between 1991 and 1994. During this time, there were five fatal accidents with 24 fatalities. (See table and figure)

Use of Helicopters in Air Tours

Helicopters are uniquely suited for air tours in Hawaii because they can operate at slow speeds and hover over scenic areas. Helicopter air tours are often conducted close to the ground, near scenic attractions so passengers can see and experience the thrill of being close to geological and terrain features, such as lava flows and waterfalls.

Some air tour operators advertise dramatic overwater flights to view whales, shorelines, cliffs, and waterfalls; entry into one-way canyons; flying close to hot molten lava; and hovering over the shoreline where molten lava flows into the ocean. Some advertising brochures, for example, describe air tours as "excitement to the boiling point," and invite tourists to "fly into the heart and heat of an active volcano" and "close enough to waterfalls to feel the cooling mist." One fixed-wing air tour operator formerly advertised that "[w]e fly you lower and slower than anv twin engine plane can . . . lower and slower than many helicopters do . . ."

While passengers are often attracted to the thrill associated with low-flying air tours, they are generally not aware of the risks involved. Risks associated with low flying air tour operations include: unpredictable winds that create less stable flying conditions; fewer options to escape unforeseen weather; unmarked or unknown obstructions; less time to select suitable emergency landing areas; increases in pilot workload because of quick stops, rapid turns, and watching for obstructions; inability to be detected by air traffic control radar; inability to conduct two-way radio communication; increased likelihood of ingesting foreign debris, including salt water spray, into the engine; less overall reaction time; and congestion of low flying traffic at scenic locations. Further, many air tours are conducted over scenic areas along rugged coasts, where, in the event of an engine failure, the pilot must ditch in the ocean. A helicopter without flotation devices, unlike most light airplanes, may sink within moments.

History and Escalation of Accidents

The growth of the air tour sightseeing industry in Hawaii has been associated with an escalation of accidents. The proximate causes of the accidents range from engine power loss to encounters with adverse weather. Contributing factors to the causes and seriousness of accidents are: operation beyond the demonstrated performance envelope of the aircraft, inadequate preflight planning for weather and routes, lack of survival equipment, and flying at low altitudes (which does not allow time for recovery or forced landing preparation in the event of a power failure).

The following table is a synopsis of selected air tour accidents involving aircraft damage, minor or serious injuries, or fatalities that occurred between September 1982 and September 1994.

SELECTED AIR TOUR ACCIDENTS IN HAWAII, SEPTEMBER 1982–SEPTEMBER 1994

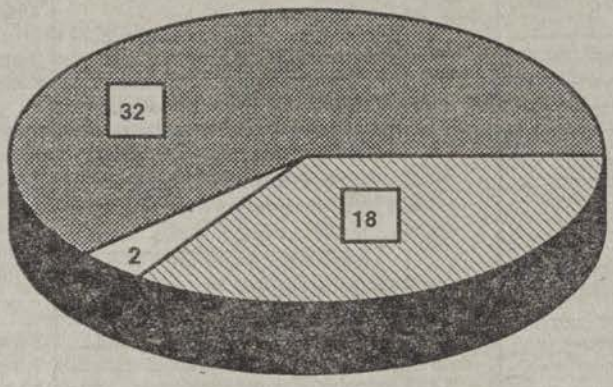
Date	Type	Part	Location	Injuries	Fatalities
9/2/82	Bell 206–L	135	Lihue	2 serious 3 minor	
4/8/84	Grumman AA–5A	91	Kamuela		4
9/26/85	Aerospatiale	135	Kula	5 minor	1
1/1/86	Cessna R172K	135	Kamuela	4 serious	1
5/18/86	Bell 206B	91	Maui	1 serious 1 minor	2
3/29/87	Bell 206B	135	Kona	3 serious 1 minor	1
4/24/87	Cessna 172N	91	Lihue		4
5/29/88	Bell 206B	135	Honolulu	2 minor	
5/20/89	Aerospatiale AS350D	135	Waialae Falls	7 minor	
6/11/89	Beech H18	135	Waipio Valley		
8/19/89	Aerospatiale AS350D	135	Volcano	1 serious 5 minor	11
5/5/91	Hughes 369HS	135	Keanae	3 minor	
6/6/91	Bell 206B	91	Lihue	3 serious 1 minor	
11/9/91	Bell 206B	135	Hilo	1 serious 2 minor	
4/22/92	Beech E18S	135	Mount Haleakala		9
9/16/92	Aerospatiale AS350B	135	Hana		7
9/21/92	Bell 47	91	Volcano National Park	3 minor	
1/25/93	Fairchild Hiller FH–1100	91	Volcano National Park	1 minor	4
2/23/94	Aerospatiale AS350B	135	Volcano National Park	1 serious 1 minor	
3/25/94	Hughes 369D	135	Hawaii National Park		
4/18/94	Hughes 369D	135	Waimea	4 serious	1
7/14/94	Aerospatiale AS350D	135	Hanalei		3
7/14/94	Aerospatiale AS350D	135	Molokai		
8/11/94	Aerospatiale AS350D	135	Waipio Valley		
9/3/94	Hughes 369D	135	Hilo		

The table shows a total of 24 air tour fatalities between 1982 and 1991 (9 years). Even though there was a decline in the number of air tour flights in 1992, the accident data show an escalation of fatal accidents between 1991 and 1994. From July 1991 through July 1994 (3 years), there were 20 air tour accidents involving 24 fatalities. (See figure.) Since January 1993, three helicopter accidents have involved landings in the ocean with two of those accidents resulting in seven fatalities. The most recent fatal accident occurred on July 14, 1994. The most recent non-fatal accident occurred on September 3, 1994. (See table.)

BILLING CODE 4910–13–M

HAWAIIAN AIRCRAFT ACCIDENT ANALYSIS
JULY 1991 THROUGH JULY 1994

Total Aircraft Accidents 52

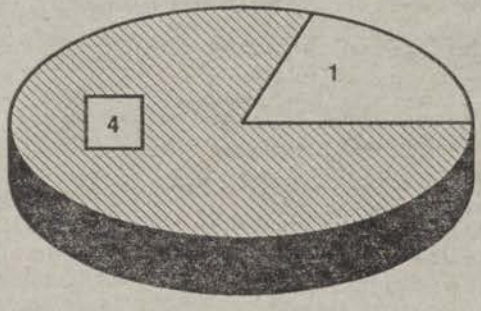


Helicopter Air Tour

Airplane Air Tour

Other than Air Tour (all categories)

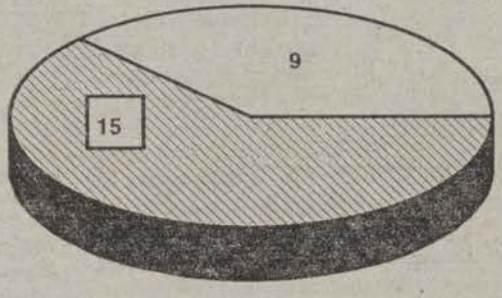
Fatal Air Tour Accidents 5



Helicopter

Airplane

Air Tour Fatalities 24



Helicopter

Airplane

SOURCE: NTSB

BILLING CODE 4910–13–C

National Transportation Safety Board Recommendations

Based on its investigation of the April 22, 1992, accident in Haleakala National Park, the National Transportation Safety Board (NTSB) recommended that the FAA "[c]reate a specific classification for, and operating rules governing, commercial air tour operators based on the complexity of flight operations, aircraft flown, flight frequency, number of passengers carried, air traffic densities in the area of operation, and other relevant factors" (A–93–8). In addition, the NTSB recommended that the FAA "[i]dentify airspace which warrants special protection due to air tour operations," and "[c]reate special operating rules for such airspace to reduce the potential for midair collisions and other accidents commensurate with meteorological and terrain considerations." (A–93–10) In response to the NTSB's recommendations, the FAA has informed the NTSB that it is considering a special rule for air tour operators in Hawaii.

Based on the NTSB recommendations, accident investigations, and discussions with the NTSB, the FAA has identified the following as needing to be addressed:

(1) Air tour operators fly too close and too low to various attractions and land features.

(2) There is no clear definition of "suitable landing site" for helicopters.

(3) Sightseeing helicopters are operating in the avoid area of the height-speed envelope (deadman's curve) where successful autorotations are not possible.

(4) Helicopters operating along the shorelines of the Hawaiian Islands should be equipped with appropriate flotation equipment.

(5) Passengers should be briefed before flights on the use of flotation gear.

Actions Other Than Rulemaking to Address the Problems

The FAA, the State of Hawaii, and the air tour industry have been attempting to correct safety problems that affect air tour operations.

In 1986, the FAA conducted a study of helicopter sightseeing operations in Hawaii. The study team was composed of representatives from the FAA, the State of Hawaii, and industry Based on the study, recommendations were made to the State and to operators in Hawaii to improve safety and community relations. Recommendations included the following:

(1) The FAA should study the possibility of imposing limitations, through operations specifications, that would require the helicopter to be operated at a combination of height and forward speed (including hover) that would permit a safe landing in event of engine power loss, in accordance with the height-speed envelope for that helicopter under current weight and aircraft altitude. These limitations would also prevent the helicopter from being flown over areas in which a safe forced landing could not be made.

(2) The FAA should advise helicopter operators who conduct passenger-carrying operations under part 91 or part 135 that a flight (1) over an area in which a successful forced landing could not be made, or (2) at an airspeed and altitude combination that places the aircraft beyond its performance capability to successfully autorotate, would be considered a reckless operation under § 91.13 (formerly § 91.9).

The study team was also concerned about the lack of helicopter flotation equipment on some aircraft, particularly for operations along the coastlines of the islands, where cliffs and rocks make a successful autorotation to shore virtually impossible. The team believes that the shoreline must offer a reasonable chance to land safely in the event of engine failure, and that, if no such area exists, appropriate helicopter flotation equipment should be required.

Also, in 1986, the FAA conducted a joint study with the State of Hawaii on helicopter heliport and airport access. A result of that study was the Helicopter Operating Plan for Hawaii. Based on portions of that plan, the Hawaiian Helicopters Operators Association (HHOA) developed its "Fly Neighborly" program. The HHOA plan calls for voluntary compliance with a standoff distance of 1,500 feet and a minimum altitude of 1,500 feet over communities. In addition, the plan calls for a 3,000-foot standoff distance in areas of Volcanoes National Park. The HHOA program includes part 91 operators as well as part 135 certificated operators. This is a voluntary program without FAA oversight.

On January 17, 1992, the FAA issued Handbook Bulletin No. 92–01, Air Tour/Sightseeing Operations. The bulletin advises principal operations inspectors to recommend to operators that they include procedures in their operations manuals for conducting air tour/sightseeing operations. The bulletin also advises the inclusion of charts of air tour areas, procedures for obtaining current weather, provisions for pilot training, and other information specific to air tour operations.

In January 1994, the FAA held four public meetings in Hawaii to investigate complaints regarding flight safety, aircraft noise, and possible intrusive flights of helicopters. While the vast majority of the commenters addressed the noise issue, some commenters did raise safety issues. Some of the public meeting comments and subsequent comments submitted to the FAA highlight a number of personal experiences of individuals who witnessed helicopters flying dangerously low over scenic areas and above people and property on the ground. In some instances, witnesses claimed that the aircraft flew lower than the people who were walking on high elevation trails.

The Honolulu Flight Standards District Office, during the past 3 years, has conducted an extensive inspection and surveillance program of the air tour industry. On July 15, 1994, in response to a number of recent accidents, the FAA initiated a comprehensive review of operations and maintenance practices of the Hawaiian air tour operators. In addition, the FAA requested that all air tour operators in the State of Hawaii immediately conduct a "stand down" safety review of their operational and maintenance practices.

Need for Emergency Rulemaking

Despite the voluntary measures, the cooperation of the Hawaii air tour operators, and the FAA's inspections, the accident data show that additional measures are necessary to ensure safe air tour operations in Hawaii. The current regulatory scheme is not comprehensive enough to ensure the safety of all air tour operations in Hawaii.

Section 91.119 prescribes minimum altitudes for airplanes and helicopters that provide for the protection of persons and property on the surface. Generally, a pilot may not operate below an altitude allowing, if power failure occurs, an emergency landing without undue hazard to persons or property on the surface. Helicopters may be operated at lower altitudes than airplanes if the operation is conducted without hazard to persons or property on the surface and the pilot can conduct a safe emergency landing in the event of power failure.

Under ideal conditions, a helicopter, unlike an airplane, can land at or near zero forward speed, provided the landing area is relatively level and free of obstructions. Factors that make an emergency landing site unsuitable include obstacles, rugged terrain, congested areas and water Obstacles range from natural terrain features and

trees to buildings and utility towers with wires strung between them.

A major factor affecting safety of flight in any single engine aircraft at low altitude is the limited choice of suitable emergency landing areas. Hawaii's unique topography—active volcanoes spewing hot molten lava, sharp cliffs, cascading waterfalls, rugged coastlines, mist-shrouded mountains, dense tropical rainforests and deep, closed canyons—often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii indicate that helicopter pilots have had insufficient time to locate suitable landing areas after engine power loss or other problems leading to accidents.

Based on the recent escalation of accidents caused by unsafe operating practices, and the fact that voluntary measures are insufficient, the FAA is implementing this emergency final rule as Special Federal Regulation (SFAR) No. 71.

The Special Federal Aviation Regulation

The FAA is promulgating these requirements in an SFAR, rather than a general rule, to address the unique problems associated with the Hawaiian air tour operating environment.

This emergency regulatory action establishes additional operating procedures, including minimum safe altitudes (and associated increases in visual flight rules (VFR) weather minimums), minimum equipment requirements, and operational limitations for air tour aircraft in the State of Hawaii.

Applicability and Definitions

This SFAR applies to parts 91 and 135 air tour operators in the State of Hawaii (section 1). In section 2, "air tour" is defined as any VFR sightseeing flight conducted in an airplane or helicopter for compensation or hire. "Air tour operator" is defined as any person who conducts an air tour.

Flotation Devices

The SFAR requires that any single-engine air tour helicopter flown beyond the shore of any island must be amphibious or equipped with emergency floats and approved flotation gear easily accessible for each occupant, or that each person on board the helicopter wear approved flotation gear. An amphibious helicopter or one equipped with floats will allow a safe emergency ditching. This requirement is specific to helicopters because helicopters, unlike airplanes, may sink rapidly after forced landings on water.

These requirements should reduce the risk of drowning, such as the deaths that occurred on January 25, 1993, when a helicopter, operating under part 91, crashed in deep water while on a sightseeing flight to view molten lava flowing into the ocean off the coast of Volcanoes National Park. Before the accident, the pilot had been hovering near the shoreline between 100 and 150 feet above sea level. When the pilot attempted to resume forward flight, he experienced a total left pedal failure. The pilot lost control and the helicopter landed in the ocean and sank. The helicopter was not equipped with flotation devices, and the pilot and four passengers were not wearing lifevests. Only the pilot survived. The NTSB found that a factor which contributed to the passengers' fatal injuries was the operator's failure to provide lifevests to the passengers.

In a July 14, 1994, accident, an air tour helicopter with seven people on board made a forced landing in the Pacific Ocean after losing power off Kauai's Na Pali Coast. Three passengers swam to shore and another was rescued from the water. The pilot and two other passengers drowned. The helicopter was not equipped with flotation devices, and the passengers did not have sufficient time to don the lifevests on board the helicopter.

Later, on the same day, a different air tour helicopter made a forced landing after losing power off the north coast of Molokai. All persons aboard the helicopter swam to shore and were rescued the next day. The helicopter was equipped with flotation devices, and the pilot and passengers had sufficient time to don the lifevests.

Flotation equipment on a helicopter should allow the helicopter to remain afloat long enough for the persons to egress safely; the individual flotation gear should allow the survivors an opportunity to swim to shore or to be picked up by rescue personnel. Flotation equipment/lifevests helped to ensure the survival of the passengers in the second accident on July 14.

The FAA is considering changing the rule to require that all single-engine helicopters conducting air tour operations beyond the shore of any island be amphibious or fitted with flotation devices. Therefore, the FAA is requesting comments on this possibility. At the close of the comment period, the FAA will analyze the comments received and, based on its analysis, determine if further rulemaking is necessary.

Helicopter Performance Plan

Section 4 requires that, before departure, the air tour operator must complete a performance plan for the helicopter flight. The pilot in command (PIC) is required to comply with the performance plan. The plan must be based on information in the rotorcraft flight manual (RFM), considering the maximum density altitude to which the operation is planned and must address such elements as maximum gross weight and center of gravity, maximum gross weight for hovering in or out of ground effect, and maximum combination of weight, altitude, and temperature for which height-velocity information in the RFM is valid. This requirement is necessary in light of accidents attributable to the failure of the pilot to stay outside the avoid area of the helicopter height-velocity envelope. The flight is not limited to the out-of-ground effect (OGE) ceiling, and the helicopter may be operated at a higher altitude provided no hovering is planned.

This requirement should enhance flight safety in light of certain accidents, including that which took place on May 20, 1989. On that date, an Aerospatiale AS350D was on a local sightseeing flight to view Waialae Falls with six passengers on board. After hovering at a low altitude near the falls, the pilot began a pedal turn and forward movement for the initial climb away from the falls. The main rotor revolutions per minute (rpm) decayed, and the pilot turned back toward the upper falls, where he thought he could land. However, the helicopter settled into a ravine, damaging the helicopter and injuring the pilot and passengers. The NTSB determined that the probable cause of the accident was the pilot's failure to maintain rotor rpm, while turning and taking off from a hover with a relatively heavy gross weight. Additional factors related to the accident were the high density altitude and rough/uneven (rocky) terrain in the emergency landing area.

Helicopter Operating Limitations

Section 5 requires that the PIC shall operate the helicopter at a combination of height and forward speed (including hover) that would permit a safe landing in the event of engine power loss, in accordance with the height-velocity envelope for that helicopter under current weight and aircraft altitude. This requirement is necessary to prevent pilots from hovering for periods of time beyond the performance capability of the helicopter and outside what the height-velocity diagram permits for safe operation.

This requirement prohibits aircraft from being operated in dangerous flight regimes, such as the January 25, 1993, accident discussed previously (when

the pilot was hovering at a low altitude over a lava flow). It also is intended to prevent the type of accidents that occurred on March 25, 1994, and April 18, 1994. On March 25, 1994, the pilot of a Hughes 369D helicopter operated under part 135 lost control and collided with mountainous terrain by the Puu'oo Vent in Hawaii National Park. The helicopter had become enveloped in a steam cloud at a 40-foot hover just before the pilot lost control. The helicopter was destroyed; the pilot and passengers sustained minor injuries. On April 18, 1994, a Hughes 369D helicopter lost power during an OGE hover and collided with rocky terrain below Waimea Falls, Waimea, Kauai. The helicopter was on a sightseeing flight operated under part 135. The pilot and three passengers were seriously injured. One passenger was fatally injured.

The requirement increases the possibility of safe landing in the event of engine failure. A safe landing may not be possible if the helicopter is within the avoid area of the height-velocity envelope when the engine failure occurs.

Minimum Flight Altitudes

Section 6 requires that, unless operating in compliance with an air traffic control clearance, or as otherwise authorized by the Administrator, air tour operations may not be conducted below an altitude of 1,500 feet above the surface; and closer than 1,500 feet from any person or property; or below any altitude provided by Federal statute or regulation. As noted earlier, Hawaii's unique topography often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii have been characterized by insufficient time for pilots to locate suitable landing areas after engine power loss or other problems leading to accidents. The requirement to maintain an altitude of 1,500 feet above the surface is necessary for safety because it allows the pilot sufficient time to react in an emergency, to notify and instruct passengers, and to prepare for a forced landing. An aircraft operating at least 1,500 feet above the surface allows the pilot a greater opportunity to select a suitable landing site than would be the case at lower altitudes. The FAA notes that these minimum distances are consistent with HHOA's Fly Neighborly program.

The accident data also show low-flying aircraft flying VFR into instrument meteorological conditions (IMC). An additional benefit from the 1,500-foot minimum altitude will be the increased basic VFR weather minimums for these air tour operations. This provision is necessary in light of the numerous accidents that have occurred when the aircraft flew into terrain because of low visibility or because the pilot was flying too low The accident data show that this is a problem for both airplanes and helicopters. For instance, on April 24, 1987, an air tour flight operated under part 91 collided with terrain in the Waimae Canyon. Marginal visual meteorological conditions were reported in the vicinity of the accident site. The pilot and three passengers were fatally injured. In the January 25, 1993, accident, in which the helicopter crashed in deep water after hovering between 100 and 150 feet above sea level, the NTSB noted that a contributing factor to the accident was the pilot's choice of a hover altitude/position inadequate to reach a shoreline in the event of an emergency.

On June 11, 1989, a Beechcraft BE–H18, operating under part 135 on a sightseeing flight, crashed near a waterfall in the Waipio Valley of the Kohala Mountains on the island of Hawaii. After filing a VFR flight plan, the pilot had departed Hilo International Airport for Maui. The pilot entered a closed canyon and ultimately impacted the canyon wall 600 to 900 feet below the rim. The pilot and 10 passengers were fatally injured, and the airplane was destroyed by impact forces and postcrash fire. The NTSB determined that the probable cause of the accident was the pilot's improper decision to maneuver with insufficient altitude in a canyon area.

On April 22, 1992, a Beechcraft E–18S operating on a VFR air tour flight collided with mountainous terrain in Haleakala National Park in an area where fog had reduced visibility around the mountain top. The FAA had provided a full weather briefing to the pilot, including an advisory that VFR flight was not recommended over the interior sections of all islands, and a forecast indicating isolated areas of 3 miles visibility due to haze and moderate rainshowers. The aircraft was destroyed, and the pilot and eight passengers were killed. Weather reports and witness statements indicate that IMC existed in the area at the time of the accident. The NTSB determined that the probable cause of this accident was the pilot's decision to continue visual flight into IMC that obscured rising mountainous terrain and his failure to use properly available navigational information to remain clear of the island.

On September 16, 1992, an Aerospatiale AS–350B departed on a sightseeing flight even though adverse weather conditions including thunderstorms, rainshowers, and poor visibility were reported. A witness reported rainshowers and mountain obscuration about the time of the accident. He stated that he saw a helicopter flying in and out of clouds and stated that he could not understand why a helicopter would be flying so close to the mountains given the adverse weather conditions. The NTSB determined that a probable cause of the accident, which involved seven fatalities, was the pilot's inflight decision to continue VFR flight into adverse weather conditions. A factor in the accident was the pilot's inability to see and avoid the mountainous terrain due to the thunderstorms.

Briefing Passengers

Section 7 contains the requirement that passengers be briefed (in addition to §§ 91.102 and 135.117) before takeoff for an air tour flight with a flight segment beyond the ocean shore of any island. The briefing shall include information on water ditching procedures, use of personal flotation gear, and emergency egress from the aircraft. The PIC must orally brief passengers, distribute written instructions, or ensure that passengers have been briefed on emergency procedures. This provision is necessary in light of the flotation equipment requirements set forth in this emergency rule.

Related Rulemaking

This SFAR is an emergency final rule addressing air tour operations in the State of Hawaii in light of the increasing frequency of accidents. The FAA is considering other rulemaking action to address noise and other issues concerning sightseeing overflights in national parks and other scenic areas. On March 17, 1994, the FAA and the National Park Service (NPS) issued a joint advance notice of proposed rulemaking (ANPRM) (59 FR 12740) seeking public comment on general policy and specific recommendations for voluntary and regulatory actions to address the effects of aircraft overflights on national parks. The FAA is currently analyzing comments submitted in response to the ANPRM. This SFAR is an emergency rule and not a final action in response to the joint FAA/NPS ANPRM.

The promulgation of requirements and restrictions in this SFAR, including the minimum flight altitude restriction, does not preclude the FAA from revisiting the issues addressed in the SFAR. As mentioned above, changes to this SFAR may be necessitated after a review of the comments received from

related regulatory proposals. Additionally, this SFAR may be amended after consideration of the comments received on this SFAR.

Paperwork Reduction Act

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 et. seq.).

Regulatory Evaluation Summary

Introduction

Changes to Federal regulations are required to undergo several economic analyses. First, Executive Order 12866 directs each Federal agency to propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. With respect to this rule, the FAA has determined that it: (1) is "a significant regulatory action" as defined in the Executive Order; (2) is significant as defined in the DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); (3) will have a significant impact on a substantial number of small entities; and (4) will not constitute a barrier to international trade. Therefore, a full regulatory analysis, which includes the identification and evaluation of cost-reducing alternatives to this rule, has been prepared. This regulatory evaluation summary presents a concise analysis of the costs and benefits associated with the final rule that amends the Federal Aviation Regulations by establishing certain operational, procedural, and equipment requirements for air tour operators in the State of Hawaii.

Costs

The FAA estimates the total cost of the SFAR to be about $2.0 million, with a present value of $1.8 million (7 percent discount rate), from 1995 to 1997. The FAA assumes that air tour operators will elect to have lifevests on board the helicopter rather than installing external flotation gear because the costs are dramatically lower. This present value cost includes the cost of about $190,000 to provide lifevests on the affected helicopters; the potential of $1.6 million in lost revenue to air tour operators due to minimum flight altitudes; and $10,000 for the development of a helicopter performance plan. Other requirements of the rule—helicopter operating limitations and passenger briefing—will impose little if any cost.

Benefits

Since 1982, Hawaiian air tour operators have experienced 15 accidents involving at least one serious injury or fatality where the lack of flotation gear, flying into bad weather, or flying low has played a role in the cause of the accident. These accidents have resulted in 48 fatalities and 30 injuries (16 serious and 14 minor). This evaluation divides these accidents into three categories: (1) Inadvertent air tour helicopter water landings without flotation gear; (2) air tour helicopter accidents related to flying into bad weather or flying low; and, (3) air tour airplane accidents related to flying into bad weather or flying low.

The potential benefits of preventing all potential sightseeing accidents of a similar nature over the next 3 years totals $36.8 million, with a present value of about $32.2 million, of which $13.7 million would be for the prevention of helicopter accidents and $18.6 million would be for the prevention of airplane accidents.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) helps to assure that Federal regulations do not overly burden small businesses, small nonprofit organizations, and airports located in small cities. The RFA requires regulatory agencies to review rules that may have "a significant economic impact on a substantial number of small entities." A substantial number of small entities, defined by FAA Order 2100.14A, "Regulatory Flexibility Criteria and Guidance," is more than one-third, but not less than 11, of the small entities subject to the existing rule. To determine if the rule will impose a significant cost impact on these small entities, the annualized cost must not exceed the annualized cost threshold established in FAA Order 2100.14A.

Small entities potentially affected by the final rule are small on-demand air tour operators in Hawaii using helicopter and fixed-wing aircraft. The FAA assumes that air tour operators will elect to have lifevests on board the helicopter rather than installing external flotation gear because the costs are dramatically lower. The FAA estimates that the annualized cost associated with acquiring lifevests for all helicopter occupants is about $127 per seat. This estimate incorporates the cost of purchasing the lifevests, maintenance, and the associated weight penalty. Also, the FAA estimates that the annualized cost of the 1,500-foot minimum altitude requirement is about $989 per seat. This cost incorporates the estimated lost profits for days when tour operations are prohibited due to inclement weather.

FAA Order 2100.14A defines small on-demand operators as those operating with a fleet of nine or fewer aircraft, which includes 37 (7 fixed-wing and 30 helicopter) of the 38 air tour operators in Hawaii. The annualized cost threshold for small operators is $4,700 in 1994 dollars. The FAA has determined that the final rule will have a significant economic effect on 6 of the 7 fixed-wing air tour operators and 25 of the 30 affected helicopter air tour operators. The final rule will impose costs greater than the annualized cost threshold of $4,700 for all affected operators except for six of the small air tour operators.

Due to the significant economic impact of the final rule on a substantial number of small entities, the FAA examined an alternative minimum altitude requirement for the affected operators. The FAA evaluated various minimum altitude requirements including 500, 800, and 1,000 feet so as to reduce the annualized cost of the final rule on individual operators. The FAA has determined that a minimum altitude requirement of 500 feet will be necessary to lower the annualized cost of the final rule below the $4,700 threshold for most air tour operators. (Under § 91.155, pilots conducting VFR flights more than 1,200 feet above the surface in class G airspace must maintain a 500-foot vertical clearance below the clouds. Pilots operating VFR in class G airspace 1,200 feet or less above the surface must remain clear of clouds.) The FAA estimates that the annualized cost of a 500-foot minimum altitude requirement is about $81 per seat. Including the cost of the lifevests, the FAA has determined that the combined cost of the lifevests and the alternative requirement for a 500-foot minimum altitude will lower the annualized cost below the $4,700 threshold for all fixed-wing air tour operators and 26 of the 30 helicopter air tour operators.

The FAA has evaluated the level of safety for the 1,500-foot minimum altitude requirement in the final rule and that provided by a 500-foot minimum altitude requirement. Although the 1,500-foot minimum altitude requirement has a significant economic impact on a substantial number of small entities, it provides

operational safety superior to that provided by a 500-foot minimum altitude and is necessary in the public interest. With the 1,500-foot minimum altitude, fixed-wing aircraft and helicopters have a longer power off gliding time, and the pilots are better able to select a suitable landing area in the event of a power failure. Hawaii's unique topography often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii have been characterized by insufficient time for pilots to locate suitable landing areas after engine power loss or other problems leading to accidents. Therefore, the additional safety margins at the 1,500-foot minimum altitude should be provided when conducting passenger flights.

International Trade Impact Analysis

The SFAR will not have any impact on international trade because the affected operators do not compete with foreign operators. The SFAR will not constitute a barrier to international trade, including the export of U.S. goods and services to foreign countries and the import of foreign goods and services to the United States.

Good Cause for Immediate Adoption

The FAA is implementing this emergency final rule due to the recent escalation of fatal air tour accidents. Despite voluntary measures, the cooperation of the Hawaii air tour operators, and the FAA's inspections, the accident data show that voluntary measures and existing regulations are insufficient to ensure safe air tour operations in Hawaii. The recent accidents discussed above indicate an urgent safety problem that cannot be adequately addressed solely by enforcement of existing regulations. For this reason, I find that notice and public procedure are impracticable and contrary to the public interest. However, interested persons are invited to submit such comments as they desire regarding this SFAR. Communications should identify the docket number and be submitted in triplicate to the Rules Docket address noted above. All communications received on or before the close of the comment period will be considered by the Administrator, and this SFAR may be changed in light of the comments received. All comments will be available, both before and after the closing dates for comments, in the Rules Docket for examination by interested parties.

International Civil Aviation Organization and Joint Aviation Regulations

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with the Standards and Recommended Practices of the International Civil Aviation Organization to the maximum extent practicable. The FAA is not aware of any differences that this amendment will present.

Federalism Implications

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is a significant regulatory action under Executive Order 12866. In addition, the FAA certifies that this regulation will have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures. A final regulatory evaluation of the regulation, including a Regulatory Flexibility Determination and Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

List of Subjects

14 CFR Part 91

Aircraft, Airmen, Aviation safety

14 CFR Part 135

Air taxi, Aircraft, Airmen, Aviation safety

The Amendment

In consideration of the foregoing, the Federal Aviation Administration amends parts 91 and 135 of the Federal Aviation Regulations (14 CFR parts 91 and 135) as follows:

PART 91—GENERAL OPERATING AND FLIGHT RULES

1. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 stat. 1180); 42 U.S.C. 4321 et seq.; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970 Comp., p. 902; 49 U.S.C. 106(g).

PART 135—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS

2. The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. app. 1354(a), 1355(a), 1421 through 1431, and 1502; 49 U.S.C. 106(g).

3. In parts 91 and 135, Special Federal Aviation Regulation No. 71, the text of which will appear at the beginning of part 91, is added to read as follows:

SFAR No. 71—Special Operating Rules for Air Tour Operators in the State of Hawaii

Section 1. Applicability. This Special Federal Aviation Regulation prescribes operating rules for airplane and helicopter visual flight rules air tour flights conducted in the State of Hawaii under parts 91 and 135 of the Federal Aviation Regulations. This rule does not apply to flights conducted in gliders or hot air balloons.

Section 2. Definitions. For the purposes of this SFAR:

"Air tour" means any sightseeing flight conducted under visual flight rules in an airplane or helicopter for compensation or hire.

"Air tour operator" means any person who conducts an air tour.

Section 3. Helicopter flotation equipment. No person may conduct an air tour in Hawaii in a single-engine helicopter beyond the shore of any island, regardless of whether the helicopter is within gliding distance of the shore, unless:

(a) The helicopter is amphibious or is equipped with floats adequate to accomplish a safe emergency ditching and approved flotation gear is easily accessible for each occupant; or

(b) Each person on board the helicopter is wearing approved flotation gear.

Section 4. Helicopter performance plan. Each operator must complete a performance plan before each helicopter air tour flight. The performance plan must be based on the information in the Rotorcraft Flight Manual (RFM), considering the maximum density altitude for which the operation is

planned for the flight to determine the following:

(a) Maximum gross weight and center of gravity (CG) limitations for hovering in ground effect;

(b) Maximum gross weight and CG limitations for hovering out of ground effect; and,

(c) Maximum combination of weight, altitude, and temperature for which height-velocity information in the RFM. is valid.

The pilot in command (PIC) must comply with the performance plan.

Section 5. Helicopter operating limitations. Except for approach to and transition from a hover, the PIC shall operate the helicopter at a combination of height and forward speed (including hover) that would permit a safe landing in event of engine power loss, in accordance with the height-speed envelope for that helicopter under current weight and aircraft altitude.

Section 6. Minimum flight altitudes. Except when necessary for takeoff and landing, or operating in compliance with an air traffic control clearance, or as otherwise authorized by the Administrator, no person may conduct an air tour in Hawaii:

(a) Below an altitude of 1,500 feet above the surface over all areas of the State of Hawaii, and,

(b) Closer than 1,500 feet to any person or property; or,

(c) Below any altitude prescribed by federal statute or regulation.

Section 7. Passenger briefing. Before takeoff, each PIC of an air tour flight of Hawaii with a flight segment beyond the ocean shore of any island shall ensure that each passenger has been briefed on the following, in addition to requirements set forth in § 91.107 or 135.117:

(a) Water ditching procedures;

(b) Use of required flotation equipment; and

(c) Emergency egress from the aircraft in event of a water landing.'

Section 8. Termination date. This Special Federal Aviation Regulation expires on October 26, 1997.

Issued in Washington, DC, on September 22, 1994.

David R. Hinson,

Administrator.

[FR Doc. 94–23840 Filed 9–22–94; 11:42 am]

BILLING CODE 4910–13–M